Program of Studies

2018-2019

"To prepare all students to be life-long learners and responsible citizens."
Dear Students and Parents/Guardians of Grafton High School,

I would like to thank the entire faculty who worked hard to bring you this publication. This Program of Studies has been prepared to inform students and their parents/guardians about course offerings, registration procedures, scheduling and program planning at Grafton High School. Careful consideration of the information included in this publication will help individual students make good decisions about courses best suited to their special abilities and interests. Proper selection of a course of study is a most important task, calling for close cooperation among students and their parents/guardians, teachers and the school counseling staff.

This booklet, we trust, will be helpful and comprehensive to you in your selection process. With the rise in colleges’ expectations it is imperative that course planning begin early and is done thoughtfully. For your convenience we have included a four-year planning guide. Please pay particular attention to requirements for graduation and requirements for entrance to college included within.

Students should choose a challenging course of studies to enhance their post secondary opportunities. Due to our rigorous course offerings our students have historically performed well on standardized tests including: MCAS, PSAT, SAT, ACT and AP exams. In addition, our students excel in the areas of visual and performing arts as well as being technologically advanced. Please keep in mind the courses Grafton High School offers enhance the high school experience along with many sports, clubs and organizations. Those offerings expand your student’s scope of the world and offer opportunities for career exploration, leadership experiences and community service.

Students will meet with school counselors to review course offerings. Please note that the courses listed on the online registration form are the only courses available to your child for the upcoming academic year. Not all courses listed in Program of Studies are available each year.

Please avail yourself of all the supports here at Grafton High School. In this booklet you will find the names of staff and phone numbers to call if you have any questions during this important decision-making process. Please do not hesitate to call on any of us.

Sincerely,

James F. Pignataro
Principal
## KEY CONTACTS AND TELEPHONE NUMBERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. James Cummings</td>
<td>Superintendent</td>
<td>508-839-5421 x1010</td>
</tr>
<tr>
<td>Tracey Calo</td>
<td>Assistant Superintendent</td>
<td>508-839-5421 x1011</td>
</tr>
<tr>
<td>Arnold Lundwall</td>
<td>Special Education Administrator</td>
<td>508-839-5421 x1030</td>
</tr>
<tr>
<td>Lisa Boisvert</td>
<td>-Section 504 Coordinator</td>
<td>508-839-5421 x1033</td>
</tr>
<tr>
<td></td>
<td>-Out of District Placement Coordinator</td>
<td></td>
</tr>
<tr>
<td>Kristen Gasper</td>
<td>Director of Human Resources/Curriculum Coordinator</td>
<td>508-839-5421 x1070</td>
</tr>
<tr>
<td>Neil Trahan</td>
<td>Director of Technology</td>
<td>508-839-5425 x1080</td>
</tr>
<tr>
<td>James F. Pignataro</td>
<td>Principal</td>
<td>508-839-5425 x4742</td>
</tr>
<tr>
<td>Jonathan Kelly</td>
<td>Assistant Principal</td>
<td>508-839-5425 x4743</td>
</tr>
<tr>
<td>Karla Evers</td>
<td>Assistant Principal</td>
<td>508-839-5425 x4744</td>
</tr>
<tr>
<td>Kathleen Egan</td>
<td>School Counselor</td>
<td>508-839-5425 x4775</td>
</tr>
<tr>
<td>Mary Green</td>
<td>School Counselor</td>
<td>508-839-5425 x4776</td>
</tr>
<tr>
<td>Laurie Rohan</td>
<td>School Counselor</td>
<td>508-839-5425 x4778</td>
</tr>
<tr>
<td>John Patraitis</td>
<td>-School Counselor</td>
<td>508-839-5425 x4777</td>
</tr>
<tr>
<td>Meaghann Babineau</td>
<td>Special Ed TEAM Chair</td>
<td>508-839-5425 x4226</td>
</tr>
<tr>
<td>Cecilia Thurber</td>
<td>School Nurse</td>
<td>508-839-5425 x4180</td>
</tr>
<tr>
<td>James Scanlon</td>
<td>-Athletic Director</td>
<td>508-839-5425 x4124</td>
</tr>
<tr>
<td></td>
<td>-Title IX Coordinator</td>
<td></td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHOLASTIC INFORMATION</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>MISSION</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>ACCREDITATION STATEMENT</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>EQUAL OPPORTUNITY</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>COURSE SELECTION</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>COURSE SELECTION CHANGES</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CERTIFICATE OF ACHIEVEMENT</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>COURSE LEVELS</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>GRADE REPORTING</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>ATTENDANCE EXPECTATIONS</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>HONOR ROLL</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>POST SECONDARY PLANNING</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>COLLEGE ENTRANCE EXAMINATION TESTS</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>DUAL ENROLLMENT</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>VIRTUAL HIGH SCHOOL</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>SUMMER SCHOOL GUIDELINES</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>STEM/STEAM CONCENTRATION</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>SPECIAL EDUCATION PROGRAMMING</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>SCHOOL COUNSELING SERVICES</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>COURSE DESCRIPTIONS</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>BUSINESS AND COMPUTER SCIENCE</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>COMMUNITY SERVICE LEARNING</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>ENGLISH</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>FINE ARTS</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>SCIENCE AND TECHNOLOGY</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>WELLNESS/FAMILY &amp; CONSUMER SCIENCE</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>WORLD LANGUAGE</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>FOUR-YEAR COURSE PLANNING WORKSHEET</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>TEST SCORES</td>
<td>53</td>
<td></td>
</tr>
</tbody>
</table>

Please call the main office at the school if you would like a copy of this document translated into a language other than English.

Por favor llame a la oficina principal en la escuela si desea una copia de este documento sea traducido a otro idioma que no sea Inglés.

Por favor, ligue para o escritório principal da escola, se você quiser uma cópia deste documento traduzido em uma língua diferente do Inglês.

يرجى الاتصال على المكتب الرئيسي في المدرسة إذا كنت تريد نسخة من هذه الوثيقة باللغة الأخرى.

Gelieve telefonisch contact op het hoofdkantoor op de school als u graag een kopie van dit document vertaald in een andere taal dan het Engels.
SCHOLASTIC INFORMATION

MISSION
The mission of Grafton High School is to prepare our students intellectually, physically, and socially for their role as lifelong learners and responsible citizens.

Core Values and Beliefs
Students learn best:
- When provided with a comprehensive, challenging, and engaging curriculum to meet all learning styles.
- In an environment that fosters high expectations for one’s own actions, motivation, and responsibility.
- When they are encouraged to think, work and communicate effectively.
- In a safe and accepting learning environment that fosters respect and tolerance.
- When health and wellness are promoted and encouraged.
- By working independently and collaboratively to accomplish goals.
- When given equal opportunity to succeed academically and develop socially.
- When the entire Grafton community supports their learning in all regards.

21st Century Expectations
- Read, write, and speak effectively
- Demonstrate the ability to apply knowledge to complete tasks effectively
- Utilize critical thinking
- Enhance knowledge and skills with technology
- Exhibit behaviors that promote personal physical fitness and a healthy lifestyle
- Practice responsible and appropriate social behaviors
- Recognize and respect diversity
- Understand and demonstrate the duties and responsibilities that come with citizenship

ACCREDITATION STATEMENT
The New England Association of Schools and Colleges accredits Grafton High School. Accreditation indicates that Grafton High School meets or exceeds criteria for the assessment of institutional quality and has available the necessary resources to achieve its stated purpose through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future.

EQUAL OPPORTUNITY
It is the policy of Grafton High School not to discriminate on the basis of sex, color, religion, sexual orientation, handicap or national origin as in accordance with Chapter 622 of the Massachusetts General Laws, Title IX, of the 1972 Education Amendment and Section 504 of the Rehabilitation Acts of 1973. These laws are based on the sound premise that in a knowledge-based society, equal opportunities in education are fundamental to equality in all other forms of human endeavor. Claims of discrimination may be appealed to the principal or school counseling department head.

COURSE SELECTION
Proper selection of a course of study is a matter of close individual attention, which requires cooperation among the student, the parent or guardian and the school. As a student proceeds through high school, the student’s abilities, interests and future plans must all be considered in selecting appropriate courses in preparation for post-secondary study or employment. Students must know their strengths and weaknesses, recognize their levels of achievement, and develop clear goals for their future before choosing courses.
All students are required to register for a total of 35 credits per school year. This reflects our school day schedule and state regulations that increase the “Time and Learning” standards at the high school level to a minimum of 990 hours of instruction.

Students should solicit the aid of their teachers, counselors and parents in making course selection decisions. Teachers provide students with a valuable source of information concerning their level of achievement as observed from daily classroom performance. Counselors help students review graduation requirements and provide careful, long-range planning to ensure that the student selects a meaningful educational program. Parents should follow the progress of their children and work closely with school personnel to assure maximum growth and development of their children in preparation for the years beyond high school.

In the event that a student fails to complete his or her online course selection, the student will be scheduled and assigned to classes by the administration, based upon available space, available staff, student record and student past performance. Those courses having insufficient enrollment may not be offered. Students involved will be notified and given an opportunity to elect an alternate course. Please note that all Grafton High School courses are included in this catalog, but some courses may not be run in a given semester or school year.

**COURSE SELECTION CHANGES**

Students and their parents or guardians should give considerable thought to course selections at the time of registration and should make a commitment to that course selection decision. Once students have registered for courses and the master schedule has been completed, it will be difficult to make changes of any kind.

When the school year begins, changes in the student’s schedule are discouraged. Students must provide a valid educational reason; obtain the approval of their teacher(s), parent/guardian and the consent of their school counselor to change a course. No course changes will be made after September 15 unless there are extenuating circumstances. In these cases, administrative approval is also required. Course changes that do occur after September 15 (semester 1) will be noted in the student’s permanent record folder and will be recorded as Withdrawn Pass (WP) or Withdrawn Fail (WF) at the time of withdrawing from the course.

**REQUIREMENTS FOR GRADUATION**

In order to graduate from Grafton High School, a student must meet all credit and course requirements listed below. Students must also successfully pass the Massachusetts Comprehensive Assessment System (MCAS) test with a minimum competency determination score of 240 (Proficient) on the English language arts and math MCAS exams, or score at least a 220 (Needs Improvement) and complete an “Educational Proficiency Plan” before they can qualify for a high school diploma. Additionally, students must meet or exceed the minimum Needs Improvement score (a scaled score of 220 or higher) on the Science and Technology/Engineering MCAS Test. The MCAS tests measure content knowledge and skills related to learning standards in the previously mentioned content areas. Students who perform exceptionally well may qualify for scholarships for Massachusetts state colleges and universities.

<table>
<thead>
<tr>
<th>English Arts</th>
<th>Language</th>
<th>20 credits</th>
<th>English 9, 10, 11, 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Studies</td>
<td>15 credits</td>
<td>To include World Civilization II, United States History I (formerly American History I), United States History II (formerly American History II)</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>20 credits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science and Technology</td>
<td>15 credits</td>
<td>To include three full-year lab sciences. One course must be Biology and one year may be in technology</td>
<td></td>
</tr>
<tr>
<td>World Language</td>
<td>10 credits</td>
<td>Beginning with the Class of 2020, all students must take a minimum of two years of the same language at the high school level.</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>2.5 credits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Physical Education | 10 credits
---|---
Electives | 30 credits
Total Credits | 122.5 credits  Minimum 122.5 out of 140 credits

**Credits Needed to Move to Next Grade**

<table>
<thead>
<tr>
<th>To move to Grade</th>
<th>To move to Grade 11</th>
<th>To move to Grade 12</th>
<th>To graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.5/35 credits= 78.6 %</td>
<td>57.5/70 credits= 82.1 %</td>
<td>87.5/105 credits= 83.3 %</td>
<td>122.5/140 credits= 87.5 %</td>
</tr>
</tbody>
</table>

Transfer students must pass the equivalent percentage of credits attempted each year. Students may choose to repeat a specific course if class size allows; however, credit will be earned only once. Both grades will be recorded on the transcript. This does not include the following courses: Concert Band, Jazz Workshop, Chorus, Chamber Choir, Physical Education, Academic Development, and Academic Support. Credit may be earned multiple times for these courses.

All students carry 35 credits per year. Regardless of accumulated total credits, all seniors must pass a minimum of 25 credits during their senior year. Students who do not meet graduation requirements will not be allowed to participate in the graduation ceremony. Students may make up the deficient credits or course(s) by successfully completing a summer school program approved in advance by the administration.

**CERTIFICATE OF ACHIEVEMENT**

Those students enrolled in the Special Education Functional School-to-Work Program may meet certificate of achievement requirements upon approval of the principal. (Certificate of achievement is not designed to be a substitute for a high school diploma. It is only a form of recognition that a student has fulfilled the Grafton High school requirements but has not passed the MCAS). Students who do not meet graduation requirements or earn a certificate of achievement will not be allowed to participate in the graduation ceremony. Students may make up the deficient credits or course(s) by successfully completing a summer school program approved in advance by the administration.

**COURSE LEVELS**

The primary goal of Grafton High School is to ensure that all students are engaged in a rigorous and meaningful course of study that guides them toward post secondary higher education, technical training or employment, and prepares students for full participation as citizens in a democratic society. To facilitate the learning process for all students and to provide an environment that leads to academic success, courses are offered at various levels of ability. High standards and expectations are set for students at all levels through the implementation of instructional approaches that accelerate academic learning.

*College Prep* - intended for college-bound students and for those students who wish to keep their post-secondary options open. Students should possess proficient skills in reading, writing, computing, analysis, comprehension and critical thinking. Students should be willing to work independently and in groups, and contribute to class discussions. Course numbers that end in 2 are intended for college-bound students. Students should possess proficient skills in reading, writing, computing, analysis, comprehension and critical thinking. Course numbers that end in 1 are designed for college-bound students who are highly motivated and who have demonstrated superior academic ability. Students should possess outstanding skills in reading, writing, computing, analysis, comprehension and aptitude in the subject area, as well as the ability to deal with abstract concepts.

*Honors* - Course work is demanding and requires students to move at a brisk intellectual pace. Students in these courses must have a very high degree of academic skills, be able to absorb a large amount of information quickly and be highly self-motivated. Students must be willing to
work independently and in groups, contribute to class discussions, and demonstrate a work ethic that is compatible with the pacing of honors level classes.

_Avanced Placement_ - intended for those exceptional students who can achieve college level work in high school. Students in these courses must have a very high degree of academic skills, be able to absorb a large amount of information quickly and be highly self-motivated. Students are also expected to read significantly above grade level. Students are required to take the College Board Advanced Placement Exams in May. **Students who do not take the AP Exam will be given Honors credit instead of AP credit.** Colleges may grant college credits and/or advanced standing to students on an individual basis based on AP test scores.

**GRADE REPORTING**

The purpose of grading and reporting procedures is to evaluate student growth and progress in relation to the curriculum and to provide a report of this academic growth for the student. Academic success and achievement in high school results from regular attendance in school and class, mastery of skills, participation in class, completion of homework and independent study, extra help, determination and conscientiousness. All students and parents receive PowerSchool accounts that enable them to check grades as often as desired. Online progress reports are prepared at mid-quarter and report cards at the end of each marking quarter.

**GRADING POLICY**

Report card grades may comprise the following components:

- Tests
- Quizzes
- Projects
- Homework
- Classwork and participation

Each of the components used shall be averaged in to determine the marking quarter grade. Marking quarter grades for full-year courses will count 80% of the student’s final grade point average, while mid-year and final examination grades will count 10% each (total of 20%) of the student’s final grade point average. Marking quarter grades for half-year courses will count 90% of the student’s final grade point average while the final examination will count 10% of the student’s final grade point average.

A five letter (A-B-C-D-F) marking system is used with plus and minus distinctions. The following grade designations are also issued to students as needed: I = incomplete; M = medical excuse; P = passing; WP = withdrawn from course passing; WF = withdrawn from course failing; X = exempt from final examination. Academic achievement grades are assigned to students on the following performance standards:

**Grade of A:** Excellent. Student demonstrates a comprehensive and in-depth understanding of all concepts and processes embodied in the course content. Student demonstrates clear evidence of understanding, reasoning, analytical and communication skills as they apply to specified learning tasks and class discussions. Student ranks in the 90-100% range in tests, quizzes, projects and final examinations.

| A+ | 97-100 |
| A  | 93-96  |
| A- | 90-92  |

**Grade of B:** Good. Student demonstrates a solid understanding of the essential concepts and processes embodied in the course content. Student demonstrates evidence of understanding, reasoning, analytical and communication skills as they apply to specified learning tasks and class discussions. Student ranks in the 80-89% range in tests, quizzes, projects and final examinations.

| B+ | 87-89 |
| B  | 83-86 |
| B- | 80-82 |

**Grade of C:** Fair. Student demonstrates a partial understanding of the essential concepts and processes embodied in the course content. Student demonstrates partial evidence of understanding, reasoning, analytical and communication skills as they apply to specified
learning tasks and class discussions. Student ranks in the 70-79% range in tests, quizzes, projects and final examinations.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>90-100</td>
</tr>
<tr>
<td>A</td>
<td>87-89</td>
</tr>
<tr>
<td>A-</td>
<td>83-86</td>
</tr>
<tr>
<td>B+</td>
<td>80-82</td>
</tr>
<tr>
<td>B</td>
<td>77-79</td>
</tr>
<tr>
<td>B-</td>
<td>73-76</td>
</tr>
<tr>
<td>C+</td>
<td>70-72</td>
</tr>
<tr>
<td>C</td>
<td>67-69</td>
</tr>
<tr>
<td>C-</td>
<td>63-66</td>
</tr>
<tr>
<td>D+</td>
<td>60-62</td>
</tr>
<tr>
<td>D</td>
<td>0-59</td>
</tr>
<tr>
<td>F</td>
<td>0-0</td>
</tr>
</tbody>
</table>

**Grade of D:** Needs Improvement. Student demonstrates a minimal understanding of the essential concepts and processes embodied in the course content. Student demonstrates a basic lack of comprehension and development of understanding, reasoning, analytical and communication skills as they apply to specified learning tasks and class discussions. Student ranks in the 60-69% range in tests, quizzes, projects and final examinations.

**Grade of F:** Failing. Student demonstrates insufficient understanding of the essential concepts and processes embodied in the course content. Student demonstrates substandard work and is deficient in the mastery of the competencies and mechanics of the course. Student may have failed to complete work assigned. Student ranks in the 0-59% range in tests, quizzes, projects and final examinations. No credit is earned for the course.

**Incomplete Grades:** Students may receive an incomplete for a course grade if he/she has excused absences during the quarter and has not completed the make-up work prior to the end of the quarter. A grade of “I” will remain for a maximum of 10 school days after report cards are issued. Should the student fail to make up the work within the 10 school day period, the student will receive a failing grade for that work which is not completed. Any extenuating circumstances, which may necessitate extension of this deadline, must be approved by the administration.

**ATTENDANCE EXPECTATIONS**

All students are expected to attend school on a regular basis. Under the laws of the Commonwealth of Massachusetts: “every child between the ages of 6 and 16 is compelled to attend school.” At Grafton High School, students 16 years of age or older are also expected to conform to the same rules of attendance and must conduct themselves accordingly. Tardies after 11:00 a.m. or dismissals prior to 11:00 a.m. are considered absences from school per state regulations and will be recorded as such under this policy. A student may lose credit in a class if he/she has excessive unexcused absences (See absence policy in student handbook).

**GRADE POINT AVERAGE AND RANK IN CLASS**

Grade Point Average (GPA) is calculated at the end of the school year. The final grades for each school year are used to determine the cumulative GPA and Class Rank for all years in high school. Class rank is only calculated at the beginning of senior year.

*Grade Point Average* is calculated based on grades earned in college preparatory courses. Grades earned in honors and advanced placement courses are given an extra weight of .5 and 1.0 respectively. To calculate a student’s weighted GPA, each final grade earned in college preparatory courses is converted to a 4.0 grading scale. Consult the following conversion scale to identify the value of each grade. Each converted grade is multiplied by the course credits earned, the products totaled, then the total is divided by the total number of course credits earned. This quotient is the student’s weighted GPA.

**GPA Conversion Scale**

<table>
<thead>
<tr>
<th>Level</th>
<th>A+</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
<th>D-</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP</td>
<td>5.3</td>
<td>5.0</td>
<td>4.7</td>
<td>4.3</td>
<td>4.0</td>
<td>3.7</td>
<td>3.3</td>
<td>3.0</td>
<td>2.7</td>
<td>2.3</td>
<td>2.0</td>
<td>1.7</td>
<td>0.0</td>
</tr>
<tr>
<td>H</td>
<td>4.8</td>
<td>4.5</td>
<td>4.2</td>
<td>3.8</td>
<td>3.5</td>
<td>3.2</td>
<td>2.8</td>
<td>2.5</td>
<td>2.2</td>
<td>1.8</td>
<td>1.5</td>
<td>1.2</td>
<td>0.0</td>
</tr>
<tr>
<td>CP</td>
<td>4.3</td>
<td>4.0</td>
<td>3.7</td>
<td>3.3</td>
<td>3.0</td>
<td>2.7</td>
<td>2.3</td>
<td>2.0</td>
<td>1.7</td>
<td>1.3</td>
<td>1.0</td>
<td>0.7</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>4.3</td>
<td>4.0</td>
<td>3.7</td>
<td>3.3</td>
<td>3.0</td>
<td>2.7</td>
<td>2.3</td>
<td>2.0</td>
<td>1.7</td>
<td>1.3</td>
<td>1.0</td>
<td>0.7</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Rank in Class* indicates how a student ranks in his or her class upon graduation. For example, a student might rank 38th out of 180 students in that student’s graduating class. Rank in class is determined by a student’s grade point average. Many colleges request GPA and class rank. The selection of valedictorian, salutatorian and honors is based upon the calculation of a student’s cumulative class rank. Of note, the student must have been enrolled in Grafton High School for
the last three years in order to be included in class rank. Transfer students can be ranked only if they have attended Grafton High School for three full years. Rank in class is calculated at the beginning of senior year.

**HONOR ROLL**

Students who achieve excellence in studies are recognized by honor roll participation at the end of each marking quarter. The following are the average grade requirements for the honor roll: *High Honors* is achieved by earning a GPA of 3.7 or higher for the quarter; *Honors* is achieved by earning a GPA between a 3.0 and a 3.6 for the quarter. GPA is calculated from all classes except those earning a Pass/Fail grade. A student may not achieve honor roll status if they have earned a grade of incomplete, or a C- (1.7) or below.

**POST SECONDARY PLANNING**

Freshman and sophomore students are encouraged to follow a well-planned sequence of courses. Course offerings will provide a strong academic foundation in career preparation that may lead to post secondary opportunities. Juniors are encouraged to begin gathering information on colleges or universities and evaluating a major course of study based on personal interest and ability. Students should review materials in the school counseling office and explore college websites. Students are also advised to visit colleges with their parents/guardians. During the senior year, students should complete and submit college applications to a range of schools. Students should also arrange through the school counseling office to attend discussions with career specialists, college admissions counselors and Armed Services recruiters. Please refer to the student handbook for guidelines pertaining to college visits.

**COLLEGE ADMISSION REQUIREMENTS**

College-bound students are encouraged in their sophomore and junior years to begin gathering information on colleges and universities and evaluating a major course of study based on personal interest and ability. The school counseling department distributes a senior handbook to assist with this process. As admissions requirements may vary among colleges, students should consult with their counselor and read the college catalog for the admission requirements for a specific college or university. Following are the Department of Elementary and Secondary Education’s requirements for admission to four-year public colleges in Massachusetts.

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 courses English 9,10,11,12</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 courses Algebra I and Algebra II, Geometry or Trigonometry, or comparable coursework, including mathematics during the final year of high school.</td>
</tr>
<tr>
<td>Science</td>
<td>3 courses Three years of lab-based science, including the natural/physical sciences or technology/engineering courses.</td>
</tr>
<tr>
<td>Social Studies</td>
<td>2 courses Two courses to include one year of U.S. History</td>
</tr>
<tr>
<td>World Language</td>
<td>2-3 courses Courses must be in a single language at the high school level</td>
</tr>
<tr>
<td>Electives</td>
<td>2 courses Any course in the areas listed, the Arts or Computer Science</td>
</tr>
</tbody>
</table>

The Grade Point Average (GPA) must be achieved based on all college preparatory courses completed at the time of application and is weighted by course levels. The minimum GPA requirement is 3.0 for a state college or state university. If a student’s GPA falls below the minimum required, a sliding scale that combines the GPA with SAT scores will be used. No applicant with a high school GPA below 2.0 may be admitted to a state college or university.

Applicants with professionally diagnosed and documented learning disabilities (documentation must include diagnostic test results) are exempt from taking standardized tests for admission to any public institution of higher education in the Commonwealth. Such students, however, must complete 16 required academic courses (an applicant may substitute two college preparatory electives for the two required world language courses only if the applicant has on file with the high school results of a psycho-educational evaluation completed within the past three years that
provides a specific diagnosis of a learning disability and an inability to succeed in a world language) with a minimum required GPA of 3.0 for state universities or present other evidence of the potential for academic success.

**COLLEGE ENTRANCE EXAMINATION TESTS**

Sophomores and juniors are encouraged to take the PSAT in October. Juniors should take the College Board SAT Reasoning test and/or ACT test in the spring. Seniors should retake standardized tests in the fall. Most colleges will accept either SAT or ACT scores. Specific colleges may require two or more SAT Subject tests, which should be scheduled at the completion of the highest level of the course taken.

The **PSAT** is a 2-hour 45-minute test of critical reading, writing and mathematical skills, which previews the SAT and serves as the qualifier for Juniors for the National Merit Scholarship Program. Students must register in advance by submitting the necessary test fee to the school counseling office.

The **SAT** is a 3-hour test (with an optional additional 50 minutes for the essay) measuring critical reading, mathematical and writing skills, with scores ranging from 200 to 800 on each section. The Writing section is scored on a scale of 2-8.

The **SAT Subject Test** is a one-hour test measuring ability in a specific subject. Highly selective colleges frequently require SAT 2 scores in the admission process. Students should plan to take the test upon completion of the related high school course and must register with the College Board in advance of the desired testing date.

The **ACT** is an achievement test measuring English, math, reading and science. There is an optional 30-minute writing test (ACT plus Writing). With the writing portion, the ACT is 3 hours and 25 minutes.

Students are encouraged to prepare for all standardized tests by utilizing test prep resources available in the school counseling office or various online sites including KhanAcademy.org and ACTstudent.org. Registration for College Board tests can be found at sat.org/register.

**DUAL ENROLLMENT**

Juniors or seniors who have a GPA of 3.0 or higher may be eligible for participation in the Dual Enrollment Program. Students may earn college credits, which also are applicable toward high school graduation for courses taken at accredited colleges with the approval of their school counselor and the principal. Prior to beginning the dual enrollment program, students must consult with their school counselor to review their physical education requirements. Students who complete the high school requirements through dual enrollment are eligible to participate in the high school graduation ceremony. It is the responsibility of students who wish to pursue courses for high school credit to complete an application form in the spring for fall semester classes and in the fall for spring semester classes. Students must meet with their school counselor on a monthly basis and arrange to have forwarded to the school both a midterm report and final mark. Students should seek eligibility requirements and application information from any Massachusetts college or community college. It is the responsibility of the student and parent to pay for the courses taken through dual enrollment. In limited situations, the state will offer limited assistance. If students will be absent from college courses it is their responsibility to contact Grafton High School on a daily basis. See your School Counselor for more information.

**VIRTUAL HIGH SCHOOL**

Virtual High School (VHS) is a globally recognized and accredited program of online learning. VHS classes are offered to all 10th, 11th, and 12th grade students and are rigorous in content and expectations. Students will be accepted based on a variety of criteria. A student must complete all the information that is included on their application. Additionally, a student who wishes to enroll must demonstrate a sense of responsibility including, but not limited to:

1. Ability to work independently.
2. Record of punctuality.
3. Respect for faculty and peers.
4. Record of responsible use of technology.

SUMMER SCHOOL GUIDELINES
Summer school is primarily for students who need to repeat a course for credit. Summer school guidelines and a list of acceptable summer schools with their course offerings are available in the school counseling office. Summer school grades will be incorporated as the fifth marking term. When averaged in with the four previous marking terms and the mid-term and final exams, the final grade average must be passing to earn course credit. For every summer school course passed, both the failing grade and the passing summer school grade will be reported on the student’s transcript, but the failing grade will not be counted in honor roll or GPA. All summer school work must be completed by August 15 except in extenuating circumstances and approved by the principal.

GRAFTON HIGH SCHOOL STEM/STEM CONCENTRATION
Student Requirements for STEM (Science, Technology, Engineering, and Math) Concentration:
- Students must enroll and pass at least 4 courses/20 credits in mathematics (current graduation requirement).
- Students must enroll and pass at least 5 courses/25 credits in science and technology (not a graduation requirement).
  - At least 5 credits in 3 different disciplines (life science (biology, anatomy, AP biology), chemistry, physics, environmental science, and/or earth science)
  - At least 2.5 credits in Technology and Engineering
- Students must enter and complete Science Fair at least 75% of years while enrolled at GHS.
- Students must send a letter of intent to receive STEM Concentration to Science and Technology Department Head for review. Letter must be submitted prior to transcript deadline.

Student Requirements for STEAM (Science, Technology, Engineering, Art, and Math) Concentration:
- Students must enroll and pass at least 4 courses/20 credits in mathematics (current graduation requirement).
- Students must enroll and pass at least 4 courses/25 credits in science and technology (not a graduation requirement).
  - At least 5 credits in 3 different disciplines (life science (biology, anatomy, AP biology), chemistry, physics, environmental science, and/or earth science)
  - At least 2.5 credits in Technology and Engineering
- Students must enroll and pass at least one visual arts course/5 credits (Art Fundamentals).
- Students must enter and complete Science Fair at least 75% of years while enrolled at GHS.
  - Can replace one science fair entry with an Arts and Technology fair entry
- Students must send a letter of intent to receive STEM Concentration to Science and Technology Department Head for review. Letter must be submitted prior to transcript deadline.

Other:
- Science and Technology Department Head will review all candidates for STEM/STEAM Concentration and notify candidates if approved.
- Science and Technology Department Head will provide names of successful STEM/STEAM Concentration candidates to School Counseling Department.
- School Counseling Department will put a STEM or STEAM Concentration notation on successful candidates’ transcripts.
- Certificates will be presented to successful STEM/STEAM Concentration candidates at Awards Night.
SPECIAL EDUCATION PROGRAMMING

Grafton High School offers a wide range of opportunities for students with individual special needs. The goal is to maximize successful learning experiences within the least restrictive learning environment, consistent with the special education regulations Chapter 71B-603CMR 28.00. The department develops programs for those students who may need specialized strategies, accommodations or modifications of curriculum in order to participate fully in the high school community and prepare for post secondary goals. Services are only open to students who have been evaluated by an assessment team and have a current, signed Individualized Educational Program (I.E.P.). The I.E.P. team will determine appropriate placement for each student according to his or her current Individualized Educational Program.

In addition to inclusion services, two specialized programs have also been developed to assist students:

(1) The foundations classes are designed for students who require remedial instruction due to a variety of disabilities and are determined appropriate by the IEP Team. Sequential courses in English language arts, social studies, mathematics and science are offered using a multi-sensory, differentiated instructional model. Each course follows the high school curriculum and focuses on application to real world experiences. Students will also take selected electives to participate with their peer group as much as possible. Class experiences are designed with clear expectations and supports, which focus on the development of basic skills to increase independence and move students toward more inclusive participation. Preparation for postsecondary education and employment is also emphasized.

(2) A functional academics-based program is also available for students as determined appropriate by the IEP Team. This is broken into two components: Life Skills Program for 14-18 year olds and School to Work Program for 18-22 year olds. Grafton High School provides identified students with opportunities to develop appropriate social, academic, vocational, emotional and daily living skills. Students will learn to understand and value their abilities, develop skills and strategies to achieve their maximum potential, and develop a sense of self-determination that will enable them to live as independently as possible after their educational program ends. Students will gain necessary insight and strategies to become productive members of the school and community as well as acquire skills to assist them in becoming active, contributing members of the community.

- Life Skills Program, special education program designed for students identified through the IEP Team. Students who experience developmental handicaps and/or cognitive challenges are typical participants in this program. Through a functional, hands-on approach, the program emphasizes activities of daily living, functional academics in core areas including but not limited to English, science, math and social studies, as well as pre-vocational and vocational training. The program provides structure, individualized instruction that includes a nurturing classroom environment as well as a community-based instructional approach to work on the generalization of skills to natural environments. Depending upon the student’s individual abilities, the program prepares them for transitioning to post secondary activities, such as the high school’s School to Work Program.

- The School to Work Program emphasizes vocational training and community learning for students 18-22 years of age, or sooner based on a recommendation by the IEP Team. This program provides work exploration through worksite visits and tours as well as through internship experiences. Job placement and onsite training is provided on an individual basis geared toward vocational interests, aptitudes and skills of the student. Other activities carried over from prior educational experiences (life skills, language-based and inclusion programs are enhanced as determined through the team process. Depending on the students’ abilities and recommendations of the educational team, they will learn skills such as transportation, acquiring a driver’s license, banking, budgeting, community access, activities of daily living and independent living skills, along with participating in post-secondary education and vocational skill development. Instruction is provided on an individual or group basis.
**9009 Life Skills/Voc Training**  
*5.0 Credits*  
*Grades 9-12*

This course covers the development of life skills needed to become independent responsible adults. These include the activities of daily living, safety, community-based learning, communications and social skills. The curriculum includes small group learning with frequent teacher interaction. Prerequisite: Recommendation of special education team.

Students may also receive individualized support for their participation in regular education through the Academic Support program. This class is offered to students who will require specific intervention to further develop skills in an identified area. This can include instruction in the areas of organization, study skills, and task completion as well as support in previewing/reviewing materials. Prerequisite: Recommendation of IEP Team.

**9080 Academic Support**  
*5.0 Credits*  
*Grades 9-12*

This course is designed for students who work best with frequent teacher interaction. Students will receive instruction on specific learning and study strategies and will be encouraged to develop organizational skills by working on and completing short and long-range assignments. Students will also receive understanding of their IEP. They will be encouraged to take an active role in their IEP process. Students will also build skills to have them able to strive toward increased independence, self-determination and self advocacy. Prerequisite: Recommendation of IEP Team.

**SCHOOL COUNSELING SERVICES**

School Counseling services combine the student support efforts of our school counselors, school psychologist, administration, resource officer, and school nurse. This student support team works together and collaborates with the school’s faculty in guiding the academic and social development of each student. Our team approach is to view the whole student as both an evolving individual and as a learner and to help our students prepare themselves for life after high school.

The counselors meet with students in order to help students plan appropriate course selections and post high school plans, and to use School Counseling Department resources. Counselors help students examine the process of self-assessment and career exploration as it relates to high school and post-secondary planning. Students are encouraged to utilize various personality inventories, publications and electronic resources to advance the process of self-assessment and to examine career options and schooling requirements. Students learn what is important in the employment and college application process and complete appropriate post secondary institution applications. Parents/guardians are also encouraged to consult with members of the school counseling staff, teachers and administrators with respect to their child’s program.
The Business and Computer Science courses are designed to prepare students for success in the working world as they learn about the expectations of the business community. Students will have the opportunity to gain knowledge in basic economics, career development, marketing, personal finance, web design and computer programming. Students will research current topics, utilize technology, and learn valuable presentation skills. Exploratory and advanced courses expose students to a wide range of technology and its applications. Students will become literate, knowledgeable and comfortable with computer systems, software, hardware, and programming languages. Skill development is a priority as students discover talents, clarify values, and define goals to ensure success as a responsible citizen in our global economy.

5511 Accounting I (College Prep) 5.0 Credits Grades 9-12
This course provides the student with a strong foundation in financial accounting. Students will learn and apply accounting theory, record business transactions into journals and ledgers, generate financial statements from scratch, perform complex investment analyses, manually audit the inventory and financial records of the school store, and prepare quarterly projects covering real world companies.

5500 Introduction to Business 5.0 Credits Grades 9-12
This course provides students with a basic introduction to the business world. Students will explore economic concepts that relate to our everyday lives as they learn about the relationship between people, business, and government. Topics will include economic activity in a global economy, business ethics and social responsibility, business ownership and operations, leadership in management, advertising, marketing, consumer rights and responsibilities, cover letters and resumes. Students will learn how to make rational consumer decisions, be aware of credit and credit card dangers, as well as create their own business idea, and write a business plan.

5660S Personal Finance 2.5 Credits Grades 10-12
This course is about advancing student money skills and modifying consumer behavior. Students will learn how to use spreadsheets to create and maintain personal monthly budgets, manage savings goals, and perform financial calculations with ease. Students will learn the ins and outs of buying automobiles, what to look for when choosing a financial institution to bank with, the unnecessary risks of credit cards and how to live without one, the importance of automating your financial life, the pros and cons of renting an apartment and buying homes, how to pay for higher education, how to file their own taxes, how to plan for retirement, and how to be educated and self-advocating consumers.

5680S Marketing 2.5 Credits Grades 10-12
This course provides students a series of experiences designed to understand and apply the foundations of marketing. Topics include customer segmentation, market research, data analysis, utility, the marketing mix, product positioning, promotion, financial analysis, supply chain management, selling techniques, pricing strategies, and brand extensions. Students will conduct in-person surveys, make frequent business recommendation presentations, sell merchandise during lunch blocks, and generally “be” the marketing department for the school store.

5630S Career Planning 2.5 Credits Grades 10-12
This course “begins with the end in mind” and provides students with the opportunity to learn about themselves to prepare for a meaningful life and satisfying career. Students will identify their life roles and goals, perform a series of thorough self-assessments, identify and research personally relevant occupations for tomorrow’s workplace, establish a personal network with professionals in those occupations, explore viable education and training pathways for after high school, create portfolio documents such as resumés and cover letters, prepare for and experience the interview process on video and with professionals from the community, and complete a
quarter-long capstone SMART goal project that will create a new accomplishment for their resumes.

5650S Entrepreneurship 2.5 Credits Grades 10-12
This course teaches students to embrace their inner "shark" and hone their creative problem solving skills. Through frequent practice of “rocket pitch” business presentations, students will develop their public speaking abilities and stage presence. In addition to learning about the lean startup model, lean canvases, business plans, franchises, buying existing businesses for sale, joining family businesses, legal forms of ownership, identifying company core values and writing mission statements, calculating profitability and returns on investment, exploring corporate social responsibility and social entrepreneurship, plus managing certain aspects of the school store, all students will form groups to pitch for funding and launch actual student-run enterprises. Students will learn and practice active listening, shared decision making, teamwork, leadership, collaboration, and other soft skills vital to career success in the workplace and as an entrepreneur. Student business teams will write business plans for how to continue their ventures following the end of the semester.

5620S Sport Management 2.5 Credits Grades 9-12
This course covers basic philosophies and principles of sport from youth level to professional level. The emphasis of the course will be on management, marketing, ethics, community and youth sports, interscholastic and intercollegiate athletics, professional sports, sponsorship, communications, broadcasting, and strategies for a successful career in sport. Course work will be both individual and group based, and will culminate with students developing their own, new sport franchise. Students will also collaborate with the GHS Athletic Department. Real world insight will be obtained through guest speakers and field trip to professional sports facility in Boston.

5690S Digital Literacy 2.5 Credits Grades 9-12
This course will explore the most recent developments in technology, assess and evaluate technologies for use within all aspects of life. Students will develop projects with technologies such as blogs, video and image capture software, podcasts, Google tools, iPads, digital art, audio and other current technologies. The focus of this class is to introduce technologies to assist students in academic and work settings. The course will be project based and include a summative project in the form of a digital portfolio.

9010 Career Planning 5.0 Credits Grades 11-12
This course prepares students in the general life skills they need to accomplish the tasks of daily life. Topics of discussion include the integration of the core subjects of English, mathematics, and social studies with skills such as job readiness skills, vocational and career exploration, social skills, practical skills of budgeting, checking accounts and money usage, governmental operations and civic responsibilities, and methods of acquiring information or services from local, state, federal and private sources. Prerequisite: Recommendation of special education team.

5900 Independent Study Business 5.0 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

5910S Independent Study Business 2.5 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.
6511 Computer Science I (College Prep) 5.0 Credits Grades 9-12
This introductory course provides the student with a hands-on opportunity to develop programming skills and to gain an understanding of computer fundamentals. Topics of instruction include, but are not limited to, ethics, system design, application design, graphics and computer programming. Students will solve problems by writing programs and completing applications using structured programming techniques. In addition, students will review and discuss the ethical responsibilities of the computer programmer in the 21st century.

6521 Computer Science II (College Prep) 5.0 Credits Grades 10-12
This course provides the student with a continuation of the principles learned in Computer Science I. Using the JAVA programming language, the student will learn a disciplined approach to computer programming. Topics include, but are not limited to, program flow, algorithm design, program and system design, error handling, procedural and data abstraction, graphical user interfaces, and app development. In addition, students will review and discuss the legal and ethical responsibilities of using information technology in the 21st century. Special project work will also be included in the curriculum. Prerequisite: Successful completion of Computer Science I.

6535S Web Design 2.5 Credits Grades 9-12
This course offers an introduction to Web site design without programming. The course gives students an in-depth understanding of Web design concepts and techniques that are essential to planning, creating, testing, publishing and maintaining Web sites. This course is recommended for students with an interest in Internet technologies, visual design and communications.

6604 AP Computer Science 5.0 Credits Grades 11-12
This course is designed to prepare students to take the Advanced Placement Level A Exam in Computer Science. The AP computer science exam is administered using the JAVA programming language. Course curriculum is outlined by the College Board and utilizes a JAVA compiler for project-based instruction. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Prerequisite: “B” average in Computer Science II and teacher approval.

6900 Independent Study Computer Science 5.0 Credits Grade 12
This is an advanced, contract-based course designed to offer the motivated student an opportunity to further explore his or her interest in a specific area of computer science and to demonstrate proficiency through special projects. The course is designed to develop problem-solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

6910S Independent Study Computer Science 2.5 Credits Grade 12
This is an advanced, contract-based course designed to offer the motivated student an opportunity to further explore an interest in a specific area of computer science and to demonstrate proficiency through special projects. The course is designed to develop problem-solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal related skills. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3660S Technology Help Desk 2.5 Credits Grades 10-12
Grafton High’s Help Desk course for students is a hands on study of technology integration in a high school setting. Students will be required to track, assess and document technology challenges and present solutions. Students will be expected to complete and maintain projects that address the integration of educational technology. Students will research and share their knowledge about emerging technologies that will enhance curriculum GHS. Students will make their learning visible by posting blogs, tweeting about their work and new technologies, and
creating and sharing screencasts and how to guides. Prerequisites: Students should have a prior understanding of Apple OS, Microsoft Windows OS, iPad iOS, and Google Apps for Education (GAFE). Additionally, Help Desk students should possess strong research, writing, critical thinking skills. This course is graded Pass/Fail.

3510S **Video Production**  2.5 Credits  Grades 10-12
Video Production is an entry-level course that will serve as an introduction to basic video/film/audio production. The goal of the course is for the student to develop the ability to capture great video images and audio, and to be able to edit those two elements together to tell a story. This course will focus basics of photography, camera functions, video editing, media analysis, and filmmaking. Students will work individually and in groups to write, shoot, and edit their own projects. Sample student projects during the semester include PSA’s, commercials, short films, music video and audio editing. Selected videos are screened during class throughout the semester to enhance the critique process. Students will work with Final Cut Pro X.

3940 **Television Production**  5.0 Credits  Grade 10-12
This course provides students with a unique opportunity to develop skills in planning, writing, using television production equipment, problem solving and time management. It has been developed for students interested in all phases of television production, including camera operation, producing, writing, audio engineering, reporting, editing, and anchoring a show. Students will explore special effects and animation. Students will gain experience using Final Cut Pro, a professional non-linear editing program, as they produce a weekly show for the school’s YouTube channel and Grafton Cable. Prerequisite: Video Production.

3940S **Television Production**  2.5 Credits  Grade 10-12
This course provides students with a unique opportunity to develop skills in planning, writing, using television production equipment, problem solving and time management. It has been developed for students interested in all phases of television, such as camera person, producer, writer, audio technician, anchor, reporter and editor. Students will explore special effects and animation. Students will gain experience using Final Cut Pro, a professional non-linear editing program, as they produce a weekly show for Grafton Cable. Prerequisite: none

3950 **Independent Study Television Production**  5.0 Credits  Grade 12
This course is open to those students who wish to continue honing their skills in editing and television production. This course is graded Pass/Fail. Prerequisite: Successful completion of Television Production

3950S **Independent Study Television Production**  2.5 Credits  Grade 12
This course is open to those students who wish to continue honing their skills in editing and television production. This course is graded Pass/Fail. Prerequisite: Successful completion of Television Production

19
COMMUNITY SERVICE LEARNING

The mission of Community Service Learning is to provide an avenue by which Grafton High School students may grow socially, intellectually and as individuals. Students are given opportunities to provide school or community service within the school environment or off campus settings, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Through service to school and/or community, our students will better understand the connection between living and learning and what it means to live as a responsible citizen whose actions reflect a compassionate and caring human being. Projects may last for a half year and would be awarded 2.5 credits or for a full year which would be awarded 5.0 credits. Students may only earn a total of 5.0 credits during the school year.

9610 Community Service 5.0 Credits Grade 12
Students are given opportunities to provide service within the community, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Students can also choose to provide Tech Force services to district schools. Students will be required to keep a self-reflective journal about their community service experience. Students will be expected to provide their own transportation to and from community service sites. This course is offered on a pass/fail basis. Requirement: Application and teacher, counselor and principal approval.

9820S Community Service 2.5 Credits Grade 12
Students are given opportunities to provide service within the community, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Students can also choose to provide Tech Force services to district schools. Students will be required to keep a self-reflective journal about their community service experience. Students will be expected to provide their own transportation to and from community service sites. This course is offered on a pass/fail basis. Requirement: Application and teacher, counselor and principal approval.

9630 School Service 5.0 Credits Grade 12
Students are given opportunities to provide service such as tutoring or in class assistance within the school setting, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Students are referred to administrators, counseling staff and faculty in order to find an appropriate match. This course is offered on a pass/fail basis. Requirement: Application and teacher, counselor and principal approval.

9840S School Service 2.5 Credits Grade 12
Students are given opportunities to provide service such as tutoring or in class assistance within the school setting, filling a need while building a personal sense of responsibility, self-esteem, and connection to the people in their surroundings. Students are referred to administrators, counseling staff and faculty in order to find an appropriate match. This course is offered on a pass/fail basis. Requirement: Application and teacher, counselor and principal approval.
ENGLISH

The English curriculum is based on the communication skills of reading, writing, speaking, viewing, listening and presenting. Specifically, the curriculum provides instruction in the different modes of written and oral expression, analytical reading, vocabulary, grammar/usage, and media study. All students must take English throughout their four years of high school. Students who fail any required English course must make up the credit. However, students may not take any two of the following courses at the same time: English 9, 10 or 11.

Students who choose to take English at the Honors level must display an exemplary grasp of the subject matter and seek unique and innovative solutions to problems. Students should expect to read and write nightly, and to be stringently assessed on both aspects of the curriculum on a regular basis. While there is no prerequisite for Advanced Placement or honors classes, teacher recommendations should be strongly considered when registering for courses at the honors level.

0101 English 9 5.0 Credits
Grade 9

This is a required, un leveled class for all freshmen. This course focuses on creating a solid skill foundation in high school level reading comprehension, literary analysis, and writing with an additional emphasis on listening and speaking. This course includes a review and regular utilization of MLA format and the close study of the writing process as it applies to literary analysis. Grammar is taught in context and mini-lesson format. The components of research are reviewed and utilized throughout the course in a variety of contexts. The study of literature includes an analytical critique of fiction, drama, poetry, non-fiction articles and the short story. Novels and works of non-fiction are read in class as well as independently and are analyzed for character, content and style. English 9 will prepare students to take English 10 at either the college preparatory or honors level.

0203 English 10 Honors 5.0 Credits
Grade 10

The purpose of English 10 at the Honors Level is to increase the student’s understanding of reading comprehension, literary analysis, and the mastery of essay writing. At the honors level, students must be willing to work independently and in groups, must be willing to contribute to class discussions, and must demonstrate a work ethic that is compatible with the pacing of honors level classes. This class requires students to think deeply and richly about both fiction and non-fiction. Additionally, English 10 Honors further develops students’ vocabulary, grammar, and habits of mind and thinking skills. Students will work on integrating outside sources into their writing, as well as developing their own points of view. Students must expect to participate regularly and constructively in order to be successful in this class. Students should expect a rigorous, challenging and active experience.

0201 English 10 (College Prep) 5.0 Credits
Grade 10

The purpose of this course is to increase the student’s understanding of reading comprehension, literary analysis and the mastery of essay writing. The literary goals of the class are achieved through the study of the novel, classic drama, non-fiction, poetry and the short story. The many elements of literature are areas of focus. Students will read all types of literature both in and outside of class. Students will also develop as readers and writers through reading comprehension practice and frequent essay writing. Throughout the course, there is an emphasis on the mechanics of grammar in relation to a number of formal writing assignments. Students will work on integrating outside sources into their writing, as well as developing their own points of view.
0304 AP English Language and Composition  5.0 Credits  Grade 11
Advanced Placement Language and Composition (11th grade) is a college-level course in effective writing and critical reading. Students will be expected to assess prose writing by examining an author’s use of diction, syntax, tone, structure, purpose, and meaning. Students will analyze writings through close reading drills, and the lessons learned will be transferred to their own writing. Students will read from primary and secondary sources carefully, to synthesize materials from these texts in their own compositions, and to cite sources using conventions recommended by the Modern Language Association (MLA.) Student’s writing skills will develop to become sufficiently rich and complex allowing them to communicate effectively with mature readers. Emphasis will be focused on knowing how to select and use appropriate modes of writing. This course encourages students to reconsider strategies of writing and help students move beyond such programmatic responses as the five-paragraph essay. This course will use a variety of literature; it will require more reading and focused writing than honors English. Additional summer reading is required. Students enrolled in this course must take the College Board Advanced Placement Exam in May.

0303 English 11 Honors  5.0 Credits  Grade 11
This course is designed for those students interested in continuing their preparation for college and those with a true interest in the nuances of all forms of literature and the craft of writing. Students choosing to take English 11 at the honors level are expected to have mastered the fundamentals of sophisticated reading comprehension and written literary analysis. Students study classic novels, primarily focusing on American/British literature, with a close analysis of major literary elements. Students also focus on SAT preparation through vocabulary, reading comprehension practice and frequent essay writing. Students are expected to complete independent reading assignments with written analysis. Throughout the course, there is emphasis on the mechanics of grammar in relation to a number of formal writing assignments.

0301 English 11 (College Prep)  5.0 Credits  Grade 11
This course is designed for those students interested in continuing their preparation for college. Students study classic novels and plays, with a close analysis of major literary elements. Students also focus on SAT preparation through vocabulary, reading comprehension practice and frequent essay writing. Students are expected to complete independent reading assignments with written analysis. Throughout the course, there is emphasis on the mechanics of grammar in relation to a number of formal writing assignments.

0542 Acting and Drama (College Prep)  5.0 Credits  Grades 9-12
This course will focus on drama as literature. Tracing the evolution of drama through its major periods, the course surveys a selection of representative plays, from Greek drama to contemporary works and analyzes them through such elements as action, character, structure and language. Reading aloud and some in-class dramatization will be required. Students are encouraged to participate in some capacity in one of the school’s annual dramatic productions.

0541S Creative Writing (College Prep)  2.5 Credits  Grades 9-12
Creative Writing is a workshop course designed for students who have an interest in or a passion for writing. We will explore various types of writing and genre throughout the semester. The goal of the course is to inspire you to continue writing, and explore your creative interests even when the course ends. In sum we will explore: The Writing Process, Observational Writing, Poetry, Basic Narrative Construction and Techniques, and Playwriting and Visual storytelling.

0750S Reading, Writing and Study Skills  2.5 Credits  Grades 9-12
The emphasis of this course will be on teaching students how to learn through reading, with studying and writing strategies incorporated with content instruction. The emphasis for this learning laboratory will be on teaching students how to learn basic skills that are applicable to all academic disciplines. Requirement: Placement based on counselor recommendation.

9040 Developmental Reading  5.0 Credits  Grades 9-12
This multi-sensory course is structured to improve students’ reading ability. It will focus on developing and improving practical reading skills. Phonological/phonetic analysis, vocabulary
development, and reading comprehension will be stressed. The development of skills will enable students to read independently and transfer reading skills to real life situations. Prerequisite: Recommendation of special education team.

### 9122 Foundations of English 9
5.0 Credits  
Grade 9

This is a language arts course geared for students whose accommodations and modifications focus specifically on their reading comprehension and written language deficits. It will be geared toward improving and refining skills in reading comprehension, written language, and oral expression. Skills stressed include capitalization, punctuation, spelling, vocabulary, sentence structure, grammar, creative writing, oral presentations, reading comprehension and literature. Prerequisite: Recommendation of special education team.

### 9222 Foundations of English 10
5.0 Credits  
Grade 10

This is a language arts course geared for students whose accommodations and modifications focus specifically on their reading comprehension and written language deficits. It will be geared toward improving and refining skills in reading comprehension, written language, and oral expression with particular attention to preparation for five paragraph essay development. Skills stressed include capitalization, punctuation, spelling, vocabulary, sentence structure, grammar, creative writing, oral presentations, reading comprehension and literature. Prerequisite: Recommendation of special education team.

### 9322 Foundations of English 11
5.0 Credits  
Grade 11

This is a language arts course geared for students whose accommodations and modifications focus specifically on their reading comprehension and written language deficits. It will be geared toward improving and refining skills in reading comprehension, written language, and oral expression. Skills stressed include capitalization, punctuation, spelling, vocabulary, sentence structure, grammar, creative writing, oral presentations, reading comprehension and literature. Additionally students will begin to address individual post-secondary planning with skills such as writing skills for the workplace, job applications, and/or college essay writing. Prerequisite: Recommendation of special education team.

### 9422 Foundations of English 12
5.0 Credits  
Grade 11

This is a language arts course geared for students whose accommodations and modifications focus specifically on their reading comprehension and written language deficits. It will be geared toward improving and refining skills in reading comprehension, written language, and oral expression. Students will continue to address individual post-secondary planning with skills such as writing skills for the workplace, job applications, and/or college essay writing. Prerequisite: Recommendation of special education team.

### 9003 English
5.0 Credits  
Grades 9-12

This is a language arts course that focuses on functional reading, writing, and comprehension. These skills are embedded within activities in the areas of life skills and pre-vocation. Prerequisite: Recommendation of the special education team.
Senior English Seminars

All seniors who are not selecting AP English Literature or Senior Honors English must take two Senior English Seminars, one each semester. Students may not take more than one Senior English Seminar per semester except with the approval of the department head. All seminars are half year, half-credit courses that fulfill one-half of the senior English requirements.

0404 AP English Literature and Composition  

**5.0 Credits  Grade 12**

AP English is a course that mirrors literature classes that students encounter during their freshman year of college not only in content but in structure as well. This course is focused on preparing students to take the AP English Literature and Composition Exam offered by The College Board. Students enrolled in this course must take the College Board Advanced Placement Exam in May. The purpose of this three-hour exam is to determine if students can successfully show that they have mastered literary and writing skills equivalent to those seen in a college freshman literature class. However, as emphasized throughout the *AP English Literature and Composition Teacher’s Guide*, “the important issue is the course, not the exam.”

Using the textbook *Perrine’s Literature: Structure, Sound and Sense*, students are expected to actively read and take thorough notes that indicate a genuine understanding of the assigned material. The expectation is that they will not merely read the assigned pages, but that they will, if necessary, re-read the material to ensure a thorough understanding and, if unclear about it, will come to class prepared to ask questions about that material. They are often expected to make presentations about the notes they take independently, so it is critical that they read for accuracy and understanding. The curriculum itself focuses on an in-depth study of prose (the novel, short stories, drama, the essay) as well as poetry. Students will read a variety of works from each genre and respond to those works through writing. Through our study of various pieces of literature and genres, students will work to develop their own voice as writers and should incorporate various literary elements in their own writing, especially in their year-long memoir project.

0403 English 12 Honors  

**5.0 Credits  Grade 12**

English 12 at the honors level assumes the student’s mastery of nuanced literary analysis, developed critical writing using outside sources, and the ability to approach challenging texts independently. Students study a range of literary genres, ranging from drama to the political essay. Students are expected to read and write regularly, as part of a curricular instruction focused on improving students’ writing and discourse. Composition is mainly expository, with some creative tasks. Students will focus on writing with a voice. Students continue to build vocabulary through the study of key words and vocabulary in context. Grammar is taught through the study of usage in student-generated work. Regular class participation is essential to student success.

0551S English 12: Gothic Literature  

**2.5 Credits  Grade 12**

The Gothic tradition is a genre of horror literature that explores the anxieties of man. The writer explores the psychological world within and often the ambiguous, confusing universe without. We will read a variety of complex texts, both British and American, and trace the development of the genre over time. Students will write a series of short papers that analyze the literary texts, and they will complete brief projects involving early Gothic backgrounds and authors. Those who enjoy reading, discussing, and writing about fun and challenging literature should take this course.

0621S English 12: Literature & Film Connection  

**2.5 Credits  Grade 12**

This course examines different forms of literature and its adaptations. Students will study poetry, drama, the novel, and non-fiction. Students will build on their prior knowledge and skills of literary analysis, including the study of narrative structure, characterization, and thematic trends. Students will then utilize this knowledge in order analyze literary adaptations. Students will learn how to compare texts and deconstruct adaptations, exercising critical viewing and reading skills through a variety of mediums, including presentations and essays. The final task for this class will involve a major research project in which students explore a related topic of interest.
This course requires strong student performance and well-developed skills. Students study the basic techniques of analyzing prose fiction. Working with novels, students learn to define questions of narrative construction, voice, characterization, theme, and style. At least three novels will be read, and students should expect to write several short literary analyses.

**0641S English 12: Reading Shakespeare**  
**2.5 Credits**  
**Grade 12**

Students will have the opportunity to read and write about some of the most beloved of the Shakespeare plays that we do not read in our regular English classes including *Julius Caesar,* *The Tempest,* and *Othello.* Focus is on understanding Shakespeare’s tragedies and comedies, his characterizations, and his approach to plot. We will also read and analyze a handful of the best-known sonnets. Students must expect to write a full analysis of a sonnet and analytical papers on each of the plays as well as memorize and recite at least one famous speech.

**0651S English 12: The Beat Generation**  
**2.5 Credits**  
**Grade 12**

This course will focus on the Beat Generation and the huge shifts in American literature and culture that took place in the 1940s, 1950s, and 1960s. Students will read the major writers of the Beat Movement and investigate the recurring themes of friendship, community, countercultural lifestyles, the role of the artist, and the role of the individual in society. As a capstone project, in conjunction with the literary reading, students will also have an opportunity to research the culture of the period and the influences of the genre. The reading of complex texts, reflective essays, research projects, and creative writing frame the course.

**0661S English 12: Ethnic American Literature**  
**2.5 Credits**  
**Grade 12**

This course will explore the influence of racial and ethnic identities on American literature. We will read, discuss, analyze, write about, and research a range of texts including works written by American authors with dual heritage including Mexican-American, Italian-American, Jewish-American, Irish-American, Chinese-American, Indian-American, Native American, and African-American authors. We will also learn, read, and write about theories of race and ethnicity throughout America’s history.

**0671S English 12: Powerful Warnings in Literature**  
**2.5 Credits**  
**Grade 12**

This course will explore the historical contexts that inspired two authors, George Orwell and Aldus Huxley, to write works of literature that pose a single question to their readers: is society more likely to be destroyed by what we hate...or by what we have come to love? The course will include the reading and analysis of various genres including the dystopian novel, non-fiction articles, and film. The course will explore dystopian literature as a genre through discussion, writing, and debate. Nonfiction sources will be incorporated with each novel to make connections, which reveal that literature is often inspired by real-world events and can serve as a warning to future generations.

**0681S English 12: The Power of Words**  
**2.5 Credits**  
**Grade 12**

This course explores the importance, influence, and power of the written and spoken word. The course includes analysis of multiple voices from the novel, seminal speeches, and landmark films. With each reading we will explore how the written, spoken, or illustrated word can be influential. Students will demonstrate a mastery of the material though written analysis, discussion, debate, and a culminating speech project.

**0691S English 12: Contemporary Literature**  
**2.5 Credits**  
**Grade 12**

This course focuses on literature from the late 20th century through the 21st century and examines the issues of our complex, modern world while emphasizing literacy skills. Encouraging the exploration of, and response to, contemporary, high-interest texts from various genres and cultures, the course emphasizes the need to understand unfamiliar perspectives and draw inferences from literature. In addition, students continue to develop their writing skills using a variety of prompts and exercises designed to challenge assumptions, encourage critical thinking, and promote effective and creative writing. The overarching theme of this course is “The World Today.”
0561S English 12: Survey of Poetry 2.5 Credits Grade 12
This course allows students to become familiar with many of the important poems in the canon of English and American verse from the mid-1700s to now. Students will engage in the analysis of poems, in research about poets and the context in which they wrote, and in a limited fashion in the composition of imitative poetry. Assessments will be based on results of class discussion, essays, quizzes, and recitations as well as compositions of original poems.

0601S English 12: Writing In Different Voices 2.5 Credits Grade 12
This course offers the opportunity to write for college and career with real-world application to writing: précis and summary, argument, research, memos, letters, and research. Focus will be on creating work of publishable quality reflecting contemporary and personal issues.

0571S English 12: The Human Condition Through the Written Word 2.5 Credits Grade 12
The human condition is "the characteristics, key events, and situations which compose the essentials of human existence, such as birth, growth, emotionality, aspiration, conflict, and mortality." In other words, it is the fundamental issues of human existence. This course will look at various forms of writing including fiction and nonfiction, poetry and prose, short and longer works to examine the human condition. Students will complete and discuss assigned reading and write about it in both short and longer assignments. The goal of the course is for students to consider the moments, people, places and choices that people make and how they influence their identity.

0900 Independent Study English 5.0 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

0910S Independent Study English 2.5 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.
Visual and performing arts are a vital part of a student’s educational program. The Fine Arts Department offers a selection of courses that will enrich and enhance the lives of all students. Courses strive to provide an understanding of the visual arts through studio activities, art history, art criticism and aesthetics. The performing arts stimulate creativity through authentic application of musical skills. By studying one or more of the arts, students can acquire skills in concentration, organization, effective listening, artistic judgment and self-discipline.

7400 Art Fundamentals (previously Art Foundations)  5.0 Credits  Grades 9-12
Building a basic understanding of art elements and principles of design, students will learn to recognize, explore, and apply knowledge to a wide variety of studio projects. Emphasis is on developing ability to see and discern, practicing studio skills and expanding creative thinking. Sketchbook assignments will complement class work. Art Fundamentals is a full-year course; successful completion of this course is a prerequisite for all subsequent half-year electives.

7510S Drawing I  2.5 Credits  Grades 10-12
Students will build on and strengthen their observational and inventive drawing skills that were introduced in Art Fundamentals and will work in a wider range of drawing mediums. Projects may include learning to draw in perspective, drawing in a larger scale and achieving realistic texture. Sketchbook assignments will complement class work. Prerequisite: Art Fundamentals

7520S Drawing II  2.5 Credits  Grades 10-12
Students who wish to continue their drawing experience with more challenging projects will work in a variety of mediums. Projects may include learning to draw metallic, transparent and textile forms, as well as, further developing a personal style. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisites: Art Fundamentals and Drawing I

7630S Painting I  2.5 Credits  Grades 10-12
Students will learn more about and apply basic color knowledge while working in watercolor, gouache and acrylic mediums. Studio projects may include learning about how to achieve opacity, translucence, and texture. Work will include painting from observation and imagination. Sketchbook assignments will complement studio work. Prerequisite: Art Fundamentals

7640S Painting II  2.5 Credits  Grades 10-12
This course will build on the knowledge and skills developed in Painting I. Studio projects will include work in acrylic and oil. Students will be expected to apply their personal vision and ideas to projects. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisites: Art Fundamentals and Painting I

7540S 2D Design  2.5 Credits  Grades 10-12
In this studio course, students will learn about and express the same design principles that graphic artists and professionals use to achieve effective compositions and layouts. Projects may include working with letter styles, cut and painted papers, and music references as inspiration. Students will keep a visual notebook that contains design references and examples from printed media. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Art Fundamentals

7610S 3D Design  2.5 Credits  Grades 10-12
Students who enjoy working in a variety of physical mediums such as mat board, clay, wire, mesh, paper, plaster, wood and found objects will use the basic elements of line, plane, form and space to create dimensional art. Projects may include realistic and abstract sculptures. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Art Fundamentals
7620S Creative Journals  
2.5 Credits  
Grades 10-12
Students will learn how to apply drawing, printing, painting, and other mixed media processes to create a visual journal. Themed possibilities may include travel, social interactions, dreams, music, family or daily routines. Projects may include other book structures. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Art Fundamentals

7650S Printmaking  
2.5 Credits  
Grades 10-12
Printmaking is the transfer of an image on a surface from a plate. Students will learn how to make multiple prints using relief, monotype, screen, and mixed media processes. Sketchbooks assignments will complement class work. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Art Fundamentals

7530S Ceramics I  
2.5 Credits  
Grades 10-12
This is an introductory studio course consisting of both hand-built and wheel-thrown methods of construction. The emphasis of this course is on understanding and applying the aesthetics, processes, form, and function of the clay medium. This course may include an examination of clay, glaze, decoration methods, and firing process. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Successful completion of Art Fundamentals

7660S Ceramics II  
2.5 Credits  
Grades 10-12
Students will continue their personal exploration of clay by learning more advance techniques of hand building, wheel throwing, and glazing. Sculpture and vessel making will focus on form, surface design and color relationships. Students will discuss and view contemporary and historical ceramic artwork. Students who are considering post-secondary art colleges may develop portfolio work in this class. Prerequisite: Successful completion of Art Fundamentals and Ceramics

7600S Advanced Studio/Portfolio  
2.5 Credits  
Grades 11-12
This class will have an emphasis on originality of work and medium. Students will build and prepare, at their own expense, a portfolio of work required by most art colleges. Students will be required to complete written reports and keep a daily sketchbook of their work. Prerequisite: Successful completion of Art Fundamentals, Drawing I, and Drawing II.

7550 Concert Band  
5.0 Credits  
Grades 9-12
This is an instrumental music instruction and concert band program. Participation requires attendance at all public performances. Participation in band provides an opportunity for students with a degree of musical ability to rehearse appropriate literature and perform in varied functions and concerts throughout the year. Students will become familiar with a variety of music literature; direct transcription of pre-classical, classical, romantic and contemporary, Broadway show music, and pop rock. Participation in band is also a valuable social experience that involves a group of young people working together to improve performance capabilities both at individual festivals and exchange concerts. Prerequisite: Reading and playing knowledge of a musical instrument (no strings).

7560 Chamber Choir  
5.0 Credits  
Grades 10-12
Chamber Choir is composed of a select group of mixed singers who are admitted by audition only. This choral group performs music of an advanced level. In addition to the group’s select repertoire and performances, members perform with the concert choir. Rehearsals include strong emphasis on vocal skills, tone production and intonation, musical terminology and development of a balanced ensemble sound. Students will encounter music of both early as well as modern composers. Prerequisite: Successful audition and concurrent performances with concert choir.
7570 Chorus 5.0 Credits Grades 9-12
Chorus is a mixed, non-auditioned chorus (all students are accepted) for students in grades 9-12. Vocal skills, techniques, rhythms, tone, pitch and group balance are emphasized. Literature will include pop and show tunes, folk songs, spirituals and classical selections. This choral group will perform at numerous school and community events throughout the year. Opportunity to participate in All-District and All-State concerts is available.

7581S Harmony and Theory (College Prep) 2.5 Credits Grades 9-12
This course is offered to students interested in the fundamentals of musical construction. The course begins with an overview of the principles of music notation and continues with a study of melodic writing and an analysis of basic harmony. It also includes ear training to enable the student to hear those aspects of music theory studied. Students will also become familiar with transposition, instrument ranges and vocal ranges. Prerequisite: Music reading skill.

7541S Jazz History (College Prep) 2.5 Credits Grades 9-12
This course offers students an opportunity to trace the developments in music through critical listening and personal research.

7500 Jazz Workshop 5.0 Credits Grades 9-12
This course is offered as an opportunity to extend the instrumental options for the high school musician. Extensive listening will be stressed, as well as a focus on jazz theory and improvisation. Prerequisite: Reading and playing knowledge of a musical instrument and participation in Concert Band, Chorus, or Chamber Choir.

7580S Guitar I 2.5 Credits Grades 9-12
This class is offered to familiarize students with the basics of playing the guitar. Basic reading, chord and strumming skills will be stressed. Students will have the flexibility and freedom to explore many guitar styles and even delve into songwriting.

7590S Guitar II 2.5 Credits Grades 9-12
This class is offered to explore techniques, styles and musicianship of the intermediate to advanced level guitarist. Students who successfully complete Guitar I are eligible to enroll in Guitar II. All other students are eligible only with the approval of the teacher.

7920 Independent Study Music 5.0 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

7930S Independent Study Music 2.5 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.
As the impact of technology on our society continues to broaden, a foundation in and facility with mathematics will become increasingly necessary. Success in mathematics courses depends upon the mastery of skills, understanding of basic concepts, proper placement and adequate motivation. With this in mind, a student's placement into a course will be determined by teacher assessment of prerequisite skills. Teachers will reflect on all aspects of student success and achievement and make a recommendation with the student's best interests in mind. Homework is an essential element in all mathematics courses. It is expected that all students will spend sufficient time on the homework assignments not only to complete the homework but also to gain the necessary practice, skills and understanding of the material. Students are encouraged to do calculations without a calculator whenever possible. It is expected that students purchase their own scientific calculator (recommended: TI 30X IIS) so that they may become familiar with its functions. Additionally, it is expected that students taking Algebra II at the Honors or College Prep level purchase their own graphing calculator (TI-84+ or higher is recommended).

2123 Advanced Algebra 1/Geometry Honors 5.0 Credits Grade 9
This is an enriched course for students who have completed Algebra 1 in Grade 8. Students will be required to do difficult assignments, independent research, and complete critical thinking projects. Students will move along rapidly in covering the work assigned. This course begins with a quick review of key Algebra 1 concepts, and then extends the students' knowledge into more advanced Algebra 1 topics. The course culminates with the coverage of numeric geometry concepts. Topics include powers, exponents, polynomials, factoring, percents, probability, data analysis, rational expressions, irrational expressions, rational expressions in open sentences, irrational numbers, radical and quadratic equations, functions, trigonometry and vectors, matrices, statistics and probability, area of polygons and circles, area and volume of solids, and coordinate geometry. Prerequisite: “C-” average in Grade 8 Algebra 1, or A average in Grade 8 Advanced Introduction to Algebra, or teacher approval.

2161 Algebra/Geometry 1 (College Prep) 5.0 Credits Grades 9-10
This course is designed to provide students with a strong foundation in each of the main branches of high school mathematics: algebra, functions, geometry, and probability and statistics. A focus on algebra will include: seeing structure in expressions, creating solving and reasoning with equations and inequalities, interpreting and building functions, and linear, quadratic and exponential function models. Intermixed in these topics, students will also study the geometry concepts of congruence and expressing geometric properties with congruence. Students will also be introduced to interpreting categorical and quantitative data through a statistics unit. Prerequisite: Completion of Grade 8 Mathematics. Teacher recommendation.

2162 Algebra/Geometry 1 (College Prep 2) 5.0 Credits Grades 9-10
This course is designed to provide students with a strong foundation in each of the main branches of high school mathematics: algebra, functions, geometry, and probability and statistics. A focus on algebra will include: seeing structure in expressions, creating solving and reasoning with equations and inequalities, interpreting and building functions, and linear, quadratic and exponential function models. Intermixed in these topics, students will also study the geometry concepts of congruence and expressing geometric properties with congruence. Students will also be introduced to interpreting categorical and quantitative data through a statistics unit.

The content of this course is the same as Algebra 1 (College Prep) but varies as to the depth, emphasis, method of instruction, and method of assessment. Prerequisite: Completion of Grade 8 Mathematics. Teacher recommendation.

2163 Algebra/Geometry 2 Honors 5.0 Credits Grades 9-10
This course is designed to expand on student foundation in each of the main branches of high school mathematics: algebra, functions, geometry, and probability and statistics. A focus on algebra will include: an introduction to complex numbers, seeing structure in expressions, arithmetic with polynomials and rational expressions, creating and reasoning with equations,
interpreting and building linear, quadratic and exponential functions. Intermixed in these topics, students will also study the geometry concepts of similarity, right triangles and trigonometry, circles and geometric dimension. Students will also be introduced to conditional probability through a statistics unit. Prerequisite: Teacher recommendation.

2252 Intermediate Algebra (College Prep 2)  5.0 Credits

Grade 11
This course is designed to bridge that gap between Algebra 1 and Algebra 2. Students will be given the opportunity to take concepts introduced in Algebra 1 and explore them more in-depth. Topics from Algebra 2 will be introduced to prepare students with a foundation to ensure success in Algebra 2 during their senior year. The curriculum will begin with creating, solving and reasoning with linear equations. A large emphasis will be placed on quadratic functions including graphing, factoring and solving quadratic equations. Students will then be introduced exponential and rational functions and operations. Prerequisite: Teacher recommendation

2141 Geometry (College Prep)  5.0 Credits

Grade 10
This course emphasizes the properties of plane geometry in order to broaden problem-solving skills through the application of algebraic skills. The topics included in this course are points, lines, angles, an introduction to inductive and deductive reasoning through proofs, similarity of figures and proportions, properties and congruency of triangles, properties of quadrilaterals and polygons, special right triangles, right triangle trigonometry, properties of circles, area and volume, coordinate geometry and transformations.

An emphasis is also put on reviewing Algebra 1 concepts such as writing and graphing equations of lines, solving equations, proportions, properties of exponents, systems of equations, and simplifying radicals. Prerequisite: Teacher recommendation.

2242 Geometry (College Prep 2)  5.0 Credits

Grades 10-11
This course covers the basic concepts of geometry and measurement. The course begins with an introduction to the elements of geometry including points, lines, planes and angles. Basic properties of triangles, quadrilaterals, polygons, parallel lines and trigonometry are included. Other topics include perimeter and area of quadrilaterals, surface area, lateral area and volume of solids, circles, coordinate geometry, similar polygons, and transformations. Emphasis is placed on the use of the formula sheet for the MCAS exam.

An emphasis is also put on reviewing Algebra 1 concepts such as writing and graphing equations of lines, solving equations, proportions, and properties of exponents. Prerequisite: Teacher recommendation.

2263 Algebra II Honors  5.0 Credits

Grades 10-11
This course develops a deeper understanding of the structure and concepts of algebraic reasoning. Algebra I concepts of solving equations and inequalities, linear relations and functions, systems of equations and inequalities are reemphasized and solidified. Additional topics include polynomials, rational polynomial expressions, irrational and complex numbers, quadratic equations, relations and functions, polynomial functions, matrices, linear programming, logarithmic functions and probability and statistics. Possession and use of a graphing calculator (TI84 or better) is required. Prerequisite: “B” average in Geometry (Honors) or teacher approval.

2261 Algebra II (College Prep)  5.0 Credits

Grades 10-12
This course begins with an in-depth study of functions. The topics included are systems of equations and inequalities, linear programming, polynomials, factoring, relations, fractional expressions, rational equations, exponents, roots, complex numbers, radical equations, and quadratic equations and functions. Prerequisite: Teacher recommendation.
### 2262 Algebra II (College Prep 2) 5.0 Credits Grades 11-12
This course fulfills the minimum entrance requirements for mathematics at most four-year state colleges and universities. The content for this course is the same as Algebra II (College Prep), but varies as to depth, emphasis, method of instruction and method of assessment. Prerequisites: Teacher approval.

### 2302 Consumer Math (College Prep 2) 5.0 Credits Grade 12
This course provides students with the basic mathematical skills necessary to function as a knowledgeable consumer. The topics included are gross income, net income, cash purchases, checking accounts, savings accounts, charge accounts and credit cards, loans, automobile transportation, housing costs, insurance and investments, record keeping, personnel, production, purchasing sales, marketing, warehousing and distribution services, accounting, accounting records, financial and information management.

### 2414 AP Calculus 5.0 Credits Grade 12
The AP Calculus course is equivalent to a one-semester college Calculus I course. This course begins with a review of elementary functions from algebra and analytic geometry, which are prerequisites for calculus. Other topics included are limits, continuity, derivatives, applications of definite integrals, derivatives and integrals of transcendental functions, techniques of integration, and solving differential equations. Possession and use of a graphing calculator (TI84 or better) is required. Students enrolled in this course must take the College Board Advanced Placement Calculus AB Exam in May. Students may elect Advanced Math and AP Calculus concurrently during their senior year. Prerequisite: “B” average in Pre-Calculus (Honors) or teacher approval.

### 2251 Calculus (College Prep) 5.0 Credits Grade 12
Calculus provides the student with in-depth instruction in the basic concepts of calculus. Calculus brings together many of the concepts and procedures from algebra, geometry and trigonometry. The focus in the first half of the year will be on functions, limits and differential calculus with an emphasis on real world problems in the area of related rates, optimization, motion and business applications. The focus in the second half of the year will be on integral calculus with applications that include finding areas enclosed by the graphs of functions, finding the volumes of shapes defined by functions and calculating quantities by integrating derivative functions. Prerequisites: Successful completion of Pre-Calculus and teacher recommendation.

### 2473 Pre-Calculus Honors 5.0 Credits Grades 11-12
This course begins with function analysis. Other topics included are properties of the trigonometric functions, graphs and inverses of the trigonometric functions, trigonometric identities and equations, applications of trigonometry, polar coordinates and complex numbers, linear relations and functions, vectors, exponential and logarithmic functions, sequences and series and the conic sections and their applications. Prerequisite: Teacher recommendation.

### 2371 Pre-Calculus (College Prep) 5.0 Credits Grades 11-12
This course begins with an in-depth exploration of functions, their composition and inverses, and the characteristics of their respective graphs. The trigonometric functions and their properties, graphs, inverses, identities, equations, and applications are covered next. Additional topics included are complex numbers, polar coordinates, vectors, logarithmic and exponential functions, conic sections, and analytic geometry. Prerequisite: “C” average in Algebra II or teacher approval.

### 2351 College Math (College Prep) 5.0 Credits Grade 12
This course is intended for students who have passed Algebra II and would like an option to Pre-Calculus. This course starts with a review of Algebra I, Geometry and Algebra II topics, with the purpose of preparing students for college placement tests. During the second semester, Algebra II concepts of polynomials, rational expressions, logarithmic and exponential functions, and Trigonometry, will be introduced. Additionally, real-world projects may be offered. Prerequisite: Successful completion of Algebra II.
The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will develop analytical and critical thinking skills and learn to describe data patterns and departures from patterns, plan and conduct studies, use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Possession and use of a graphing calculator (TI-84 or better) is required. Prerequisite: Teacher recommendation.

In this course, students will advance their conceptual understanding of algebraic structure. Algebraic functions and operations will be explored with the intent of discovering interrelationships and applications. Prerequisite: Completion of Algebra II or teacher recommendation.

This course is designed to improve proficiency in math, with a focus on the skills required to pass the MCAS grade 10 Math exam. Topics from arithmetic, algebra, geometry, data analysis, statistics, and probability will be blended to provide students the opportunity to obtain a comprehensive understanding of the subjects’ relationships. Skills will be reviewed and reinforced in order to maximize the possibility for student success. Placement based on 8th grade MCAS scores that fall in Needs Improvement or Failing range. This course is typically assigned, as an additional half-year course, to sophomores concurrently enrolled in L2 math courses.

Under certain circumstances, Accounting I (#5511) may be used to satisfy a student’s 4th year math requirement.

This course provides the student with a strong foundation in financial accounting. Students will learn and apply accounting theory, record business transactions into journals and ledgers, generate financial statements from scratch, perform complex investment analyses, manually audit the inventory and financial records of the school store, and prepare quarterly projects covering real world companies.

This is a mathematics course geared for the student whose accommodations and modifications focus specifically on their math calculations and problem solving, as well as processing disabilities. This course is designed to improve math vocabulary, skills, and topic connections with a focus on life in the real world. Topics from arithmetic, algebra, geometry, data analysis, statistics, and probability will be blended to provide students the opportunity to understand and make personal connections to math in the world around us. Skills will be pre-taught, practiced, and reviewed for reinforcement. The main goal of this course will be to maximize student success in academics and life. Prerequisite: Recommendation of special education team.

This is a mathematics course geared for the student whose accommodations and modifications focus specifically on their math calculations and problem solving, as well as processing disabilities. This course is designed to improve math vocabulary, skills, and topic connections with a focus on life in the real world. A continuation of topics from arithmetic, algebra, geometry, data analysis, statistics, and probability will be blended to provide students the opportunity to understand and make personal connections to math in the world around us. Skills will be pre-taught, practiced, and reviewed for reinforcement. The main goal of this course will be to maximize student success in academics and life. Prerequisite: Recommendation of special education team.
This is a mathematics course geared for the student whose accommodations and modifications focus specifically on their math calculations and problem solving, as well as processing disabilities. This course is designed to improve math vocabulary, skills, and topic connections with a focus on life in the real world. A continuation of topics from arithmetic, algebra, geometry, data analysis, statistics, and probability will be blended to provide students the opportunity to understand and make personal connections to math in the world around us. Additionally, students will begin to address topics related to individual post-secondary planning with skills such as budgeting and balancing a checkbook. Skills will be pre-taught, practiced, and reviewed for reinforcement. The main goal of this course will be to maximize student success in academics and life. Prerequisite: Recommendation of special education team.

This is a mathematics course geared for the student whose accommodations and modifications focus specifically on their math calculations and problem solving, as well as processing disabilities. This course is designed to improve math vocabulary, skills, and topic connections with a focus on life in the real world. A continuation of topics from arithmetic, algebra, geometry, data analysis, statistics, and probability will be blended to provide students the opportunity to understand and make personal connections to math in the world around us. Students will continue to address topics related to individual post-secondary planning with skills such as budgeting and balancing a checkbook. Skills will be pre-taught, practiced, and reviewed for reinforcement. The main goal of this course will be to maximize student success in academics and life. Prerequisite: Recommendation of special education team.

This is a functional math course geared for students whose accommodations and modifications focus specifically on the incorporation of functional math in daily life activities. These skills are embedded within activities in the areas of Life skills and pre-vocation. Prerequisite: Recommendation of special education team.

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.
Advances in science and technology continue to dominate our changing world. Through a comprehensive curriculum based on an inquiry and investigative approach, the Science and Technology Department provides the students the opportunity to acquire the knowledge, skills and processes necessary to function in a technologically advanced society. Emphasis is placed on incorporating an interrelationship of science concepts with technological applications.

3424 AP Biology  
5.0 Credits  
Grades 11-12
This course is designed for those capable students who intend to pursue a career in the life sciences. The content of the course includes cellular biology, biological chemistry and energetics, concepts and mechanisms of evolution, classical and modern genetics, and is based on twelve laboratory investigations. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Prerequisites: “A” average in Biology College Prep and “A” average in Chemistry College Prep, or “B” average in Biology Honors and “B” average in Chemistry Honors, or teacher approval.

3203 Biology Honors  
5.0 Credits  
Grade 9
This is a comprehensive course in biology that will progress at an accelerated pace. Some specific topics covered include cell biology, biological chemistry, bioenergetics, genetics, evolution, taxonomy and ecology. A greater emphasis will be placed upon individual investigations in both laboratory work and research topics. Students electing this course will be expected to demonstrate depth of knowledge of the various concepts presented.

3201 Biology (College Prep)  
5.0 Credits  
Grade 9
In this course students will study topics in cell biology, biological chemistry, bioenergetics, genetics, evolution and taxonomy. The purpose of the course is to familiarize students with the central concepts of the above topics and the associated terminology. The course serves as a foundation for all other life science courses.

3323 Anatomy and Physiology Honors  
5.0 Credits  
Grades 10-12
The course is devised as a series of lecture and laboratory investigations concerning the structure and function of the human body. The anatomy and physiology of the various organ systems, the embryology of the human body, and human genetics will be considered. The student will be expected to apply the terminology and concepts covered in Biology to topics covered in this course. A greater emphasis will be placed upon individual investigations in both laboratory work and research topics. Students electing this course will be expected to demonstrate depth of knowledge of the various concepts presented. Prerequisite: “A” or better in Biology College Prep, “B” or better in Biology Honors, or teacher approval.

3321 Anatomy and Physiology (College Prep)  
5.0 Credits  
Grades 10-12
The course is devised as a series of lecture and laboratory investigations concerning the structure and function of the human body. The anatomy and physiology of the various organ systems, the embryology of the human body, and human genetics will be considered. The student will be expected to apply the terminology and concepts covered in Biology to topics covered in this course.

3614 AP Chemistry  
5.0 Credits  
Grades 11-12
This course is intended for students who wish to continue with their study of chemistry. After a brief review of first year chemistry, thermodynamics, bonding, redox and reaction kinetics will be covered in depth. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Prerequisite: “A” average in Chemistry College Prep, “B” average in Chemistry Honors, or teacher approval.
3313 Chemistry Honors 5.0 Credits Grades 10-12
In this course, several major topics are covered, including the periodic table and the elements, equations and reactions, gas laws, atomic structure, periodic law, bonding, solutions, acids and bases, redox reactions and nuclear reactions. Prerequisite: “B” average in Algebra I Honors or teacher approval.

3311 Chemistry (College Prep) 5.0 Credits Grades 10-12
In this course several major topics are covered including atomic structure, periodic law, bonding, solutions, acids and bases, redox reactions and nuclear reactions. Prerequisite: “B” average in Algebra I or teacher approval.

3634 AP Environmental Science 5.0 Credits Grades 11-12
The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Students enrolled in this course must take the College Board Advanced Placement Exam in May. The College Board recommends that students should have completed two years of high school laboratory science—one year of life science and one year of physical science. They should also have taken at least one year of algebra. Prerequisite: “A” average in two College Prep science courses, “B” average in two Honors science courses, or teacher approval.

3633 Environmental Science Honors 5.0 Credits Grades 10-12
Extensive environmental principles will be studied including, interactions of living and non-living things in the major biomes of the world, water, soil & groundwater, natural resources, cycles in nature, energy, and community planning. Population dynamics, issues and policies and managing living systems will be the additional major areas of study. Sampling and analysis of soil and water around Grafton will be explored, community involvement will be encouraged and field work will be required. Students will be introduced to a few basic tools and instruments used in sampling and testing in an environmental field. Careers in an Environmental Science field will be discussed. Prerequisite: “A” or better in Biology College Prep, “B” or better in Biology Honors, or teacher approval.

3531 Environmental Science (College Prep) 5.0 Credits Grades 10-12
This course examines the interactions of living and non-living things in the major biomes of the world, cycles in nature, human population growth, resources and energy, land use, and the types and causes of pollution. Students will also examine our responsibility to the environment both locally and globally. Laboratory and fieldwork will be done along with telecommunication projects of environmental testing on a regular basis.

3644 AP Physics 1 5.0 Credits Grade 10-12
AP Physics 1 is the equivalent to a first-semester college course in algebra-based physics. Topics will include kinematics; Newtonian Mechanics (including rotational motion); work, energy and power; mechanical waves and sound; and introductory, simple electric circuits. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Students are not required to have taken a prior course in physics, however it is recommended that students have successfully completed courses in algebra and geometry, and are at least concurrently enrolled in Algebra II.

3643 Physics Honors 5.0 Credits Grades 10-12
This course offers similar content as Physics college prep, however students electing this course will be expected to demonstrate greater depth of knowledge of the various concepts presented. This course offers students an introduction to the fundamental ideas that support the laws and theories of both classical and modern physics. Topics will include mechanics, thermodynamics, waves and sound, optics, fluids, electricity and magnetism, relativity and quantum phenomena.
Prerequisites: It is recommended that students have successfully completed courses in algebra and geometry, and are at least concurrently enrolled in Algebra II.

3641 Physics (College Prep)  5.0 Credits  Grades 10-12
This course offers students an introduction to the fundamental ideas that support the laws and theories of both classical and modern physics. It is intended for students who wish to develop a conceptual framework through labs, research and hands-on investigations, rather than quantitative analysis and problem solving. Topics will include mechanics, thermodynamics, waves and sound, optics, fluids, electricity and magnetism, relativity and quantum phenomena.

3741S Extreme Ecosystems (College Prep)  2.5 Credits  Grades 10-12
This course has been designed for students with a passion for and a strong foundation in the life sciences. Students will be introduced to topics of ecology and botany with a concentration on diverse New England ecosystems. Course work will include laboratory work, field study, research and the identification of flora and fauna of New England. Prerequisite: Students must pass Biology before enrolling in this course.

3501S Astronomy (College Prep)  2.5 Credits  Grades 10-12
This course is designed to investigate the fundamental theories that provide the foundation of modern Astronomy. The students will explore a range of topics including the origin and early history of the universe, the evolution of galaxies and stars, the development and migrations of the planets and smaller bodies of the solar system, the Earth in space, the Moon and its history, and the past, present, and future of interplanetary travel. The classic perspectives of Copernicus, Galileo, Brahe, and others will be juxtaposed with cutting-edge problems facing modern astronomers in order to develop a comprehensive appreciation of the world above.

3521S Geology (College Prep)  2.5 Credits  Grades 10-12
Topics for investigation include history of the Earth, rock cycle, the plate tectonic theory, earthquakes, volcanoes, fossil record and mass extinction events. The development of the Geologic Time Scale and the concept of “deep time” will also be covered.

3541S Oceanography (College Prep)  2.5 Credits  Grades 10-12
This course will survey the complex systems that operate within the world ocean. Topics include ancient and modern exploration of the oceans, physical and chemical oceanography, open – ocean and deep water currents, waves, storms, tides, and coastal environments. Special emphasis will be placed on the coastlines of New England.

3561S Meteorology (College Prep)  2.5 Credits  Grades 10-12
This course will provide the opportunity to examine the careful science behind the television weather forecast. Students will study the composition and structure of the atmosphere, global atmospheric circulation, world-wide weather patterns, cloud formation and precipitation, storm systems, including thunderstorms, tornadoes, blizzards, and hurricanes. Long-term and short-term weather forecasting, man’s impact on climate, and the potential for catastrophic global warming will also be covered.

9232 Foundations of Biology  5.0 Credits  Grade 9
This is a science course geared for the student whose accommodations and modifications focus specifically on their language and processing disabilities. This is an inquiry-based course designed to create awareness of scientific thought and problem solving. It will introduce concepts in biology by demonstrating how scientific information is acquired and analyzed. The themes that are carried throughout the course are observation, reasoning, predicting from regularities and communication of conclusions. Some specific topics covered include cell biology, genetics, evolution, taxonomy and ecology. Prerequisite: Recommendation of special education team.

9032 Foundations of Science I  5.0 Credits  Grade 10
This is a science course geared for the student whose accommodations and modifications focus specifically on their language and processing disabilities. This is an inquiry-based course
designed to create awareness of scientific thought and problem solving. It will introduce concepts in environmental science by demonstrating how scientific information is acquired and analyzed. The themes that are carried throughout the course are observation, reasoning, predicting from regularities and communication of conclusions. This course examines the interactions of living and non-living things in the major biomes of the world, cycles in nature, human population growth, resources and energy, land use, and the types and causes of pollution. Students will also examine our responsibility to the environment both locally and globally. Prerequisite: Recommendation of special education team.

9306 Foundations of Science II  

5.0 Credits  

Grade 11  
This is a science course geared for the student whose accommodations and modifications focus specifically on their language and processing disabilities. This is an inquiry-based course designed to create awareness of scientific thought and problem solving. It will introduce concepts in anatomy by demonstrating how scientific information is acquired and analyzed. The themes that are carried throughout the course are observation, reasoning, predicting from regularities and communication of conclusions. The anatomy and physiology of the various organ systems, the embryology of the human body, and human genetics will be considered. The student will be expected to apply the terminology and concepts covered in Biology to topics covered in this course. Prerequisite: Recommendation of special education team.

9006 Science  

5.0 Credits  

Grades 9-12  
This science course focuses on functional aspects of environmental activities such as weather, plans/cultivation and basic anatomy. The course is structured to include small group learning with frequent teacher interaction. These skills are embedded within activities in the areas of Life skills and pre-vocation. Prerequisite: Recommendation of special education team.

3090S Adaptive Science  

2.5 Credits  

Grades 9-12  
This is an inquiry-based course designed to create awareness of scientific ideas. It will expose students to a variety of scientific concepts through exploration and hands on activities. The themes that are carried throughout the course are observation, reasoning, predicting and communication of observations and conclusions. Emphasis will include hands-on experiences. Prerequisite: Recommendation of special education team.

3900 Independent Study Science  

5.0 Credits  

Grade 12  
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student / teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3910S Independent Study Science  

2.5 Credits  

Grade 12  
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student / teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3011S Architecture (College Prep)  

2.5 Credits  

Grades 9-12  
Students will explore engineering processes by planning and designing a house. Students will follow the design process to determine the needs and wants of a homeowner, material and financial limitations, state and town requirements, and the methods of modern construction. Using CAD, students will develop and present a set of working drawings for the home they have designed.

42
3021S **Structural Engineering** *(College Prep)*  
**2.5 Credits**  
**Grades 9-12**  
Students will utilize a variety of computer software to aid in planning and designing a variety of structures including bridges, towers, and buildings. Testing of structures, record keeping, and making predictions will build critical thinking skills and show why structures require engineering. Students will also work in groups in a hands-on laboratory setting, generating model structures to evaluate and present their work.

3031S **Automotive Design** *(College Prep)*  
**2.5 Credits**  
**Grades 9-12**  
Students will explore machine engineering by planning, designing, and constructing a scale model concept car. Using the design process, students will discover the limiting factors in automotive design and combine them with styling to create a new and exciting automobile. Starting with CAD drawings, students will develop their ideas, solve problems, and design an automobile. Upon completion of their design, students will construct a scale model of the vehicle following the same process used by auto manufacturers. Completed models will be presented in class.

3211S **CAD/CAM** *(College Prep)*  
**2.5 Credits**  
**Grades 9-12**  
Students will link CAD and the design process to CAM (computer aided manufacturing). Hands-on exploration of the manufacturing process and the integration of CNC (Computer Numeric Control) machinery will be included in classroom projects. Students will experience modern manufacturing by doing the thinking and letting the machinery do the work. Class will include work with local business partners as well as field trips and modern machine and manufacturing research.

3920 **Independent Study CAD**  
**5.0 Credits**  
**Grade 12**  
Students will apply their CAD knowledge to real life situations. Students will locate and build links with local companies and residents solving design problems. Projects may include planning and designing an addition to a home, a new home, a new product, or engineering or refining an existing product. Students will gain communication skills by working hand-in-hand with a customer or client. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3930S **Independent Study CAD**  
**2.5 Credits**  
**Grade 12**  
Students will apply their CAD knowledge to real life situations. Students will locate and build links with local companies and residents solving design problems. Projects may include planning and designing an addition to a home, a new home, a new product, or engineering or refining an existing product. Students will gain communication skills by working hand-in-hand with a customer or client. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

3560 **Electricity and Electronics**  
**5.0 Credits**  
**Grades 10-12**  
Students will explore the world of electricity in two common applications. Starting with low voltage DC power, students will see how the wiring system in a car works. Students will complete several projects like wiring in a stereo system, an alarm, and troubleshooting problems. Residential electricity will then be explored concentrating on safety and the application of state and local codes. Projects will include constructing and wiring a scale model home. Students will also explore the technology of computers by building a computer system. This hands-on course walks students through the process of computer electronics and allows them to experience the process and problems that occur in building a computer system. This course also offers students an opportunity to prepare for the A+ Certification, a nationally recognized certification in computer assembly, upgrade and repair.

3570 **Manufacturing I**  
**5.0 Credits**  
**Grades 9-12**  
Students will explore the design and manufacturing processes used in today's workplace. Starting with product design and planning, students will develop ideas, identify limits, and explore the processes of manufacturing. Working in teams in a simulated workplace
environment, students will manufacture products, analyze results, record progress, and apply safe work habits.

3670 Manufacturing II 5.0 Credits Grades 10-12
Students will work as a team on an assembly line constructing projects in a simulated workplace environment. Projects such as class and organization fundraisers, community projects, and lower grade learning activities will be part of the experience. Students will gain valuable real work experience while helping others and working on a team. Prerequisite: Successful completion of Manufacturing I or teacher approval.

3580 Structures 5.0 Credits Grades 11-12
Students will learn to design, plan, construct and test load-bearing structures. Working in a hands-on shop, students will construct bridge, tower, truss and building structures. Projects will include both models and full size structures. Testing of structures, record keeping, and predictions will all build critical thinking skills and show how and why structures require engineering. State and local building codes will also be explored. Students will also work as part of a team in designing, planning and constructing a small structure such as a storage shed. In hands-on activities, students will be able to apply their knowledge of structures in practical applications. Students may also visit local building sites to see first-hand how their experiences in the shop apply to real world situations.

3980 Ind. Study Manufacturing 5.0 Credits Grade 12
Students will use all their knowledge and experience of the design process, manufacturing processes, material limitations, and problem solving by manufacturing a highly technical project. Projects may include guitars or other stringed instruments, skis, snowboards or boats. Students may work alone or in teams to complete projects. Specific course topics and units are arranged by student/teacher conferences. Requirement: Application and teacher, counselor and principal approval.

3990S Ind. Study Manufacturing 2.5 Credits Grade 12
Students will use all their knowledge and experience of the design process, manufacturing processes, material limitations, and problem solving by manufacturing a highly technical project. Projects may include guitars or other stringed instruments, skis, snowboards or boats. Students may work alone or in teams to complete projects. Specific course topics and units are arranged by student/teacher conferences. Requirement: Application and teacher, counselor and principal approval.
The Social Studies Department recognizes the effects of cultural diversity in history and society and strives to create an understanding of history’s relevance and the importance of social studies in the process of developing active world citizens. Social studies is the study of social relationships in all their variations both past and present. It draws its substance from the disciplines of anthropology, economics, geography, government, history, sociology and psychology. The social studies program strives to develop independent thinking skills within students in order to help them make rational decisions consistent with basic democratic values in a rapidly changing world.

1203 World Civilization II Honors 5.0 Credits Grade 9
This course is an examination of people, places and events throughout world history. This course begins with the Age of Enlightenment and concludes with an analysis of post World War II societies and civilizations. The content studied will focus on the political, social, economic, religious, scientific and technological factors that have shaped world civilization. Students will also work on developing the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events and determining causal relationships as well as comparing and contrasting the point of view of two or more sources. Students are also required to participate in class and small group discussion. This course is designed as an advanced class for students who have a considerable degree of self-discipline and intellectual curiosity and assumes the ability on the part of the student to think critically, to read and write proficiently, and to utilize primary source materials. Research reports, projects, essays and challenging readings are regularly assigned. Prerequisite: ”A-” in World Civilization I and ELA, or teacher approval.

1201 World Civilization II (College Prep) 5.0 Credits Grade 9
This course is an examination of people, places and events throughout world history. The course begins with the Age of Enlightenment and concludes with an analysis of post World War II societies and civilizations. The content will focus on the political, social, economic, religious, scientific and technological factors that have shaped world history. Students will also work on developing the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events and determining causal relationships as well as comparing and contrasting the point of view of two or more sources. Students are also required to participate in class and small group discussion. A variety of assessment strategies are utilized. No prerequisites for college prep.

1303 United States History I Honors 5.0 credits Grade 10
The course is part one of a two-year survey course of United States History. It is designed to enhance the students’ knowledge of various aspects of American society from Colonial and Revolutionary America through Reconstruction. Students will study the causes and consequences of the American Revolution, crisis that led to the development of the Constitution, the early national period, the reform movements of the 1800s, westward expansion, and the causes and consequences of the Civil War. Students will continue to develop the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events and determining causal relationships as well as comparing and contrasting the point of view of two or more sources. Students are also required to participate in class and small group discussion. A variety of assessment strategies are implemented. The course covers the same content as United States History I College Prep but the scope and pacing are different. Students are required to complete several analytical essays per quarter and write a research paper. Prerequisite: “B-” average in World Civilization II Honors, “A-“ in World Civilization II College Prep, or teacher approval.

1301 United States History I (College Prep) 5.0 credits Grade 10
The course is part one of a two-year survey course of United States History. It is designed to enhance the students’ knowledge of various aspects of American society from Colonial and Revolutionary America through Reconstruction. Students will study the causes and consequences of the American Revolution, the crisis that led to the development of the Constitution, the early
national period, the reform movements of the 1800s, the expansion of the West, and the causes and consequences of the Civil War. Students will continue to develop the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events, determining causal relationships between events as well as comparing and contrasting the point of view of two or more sources. Students are also required to participate in class and small group discussions. A variety of assessment strategies are utilized.

1324 AP United States History  5.0 Credits  Grade 11
This course is intended for students who are ready for the challenge of a college level course. Designed to cover the American experience from Exploration through the post Vietnam era, a variety of approaches will be used. While political and economic perspectives are central, cultural and social approaches are integral in developing a balanced view of American history. Students making a commitment to Advanced Placement should expect the reading and writing demands appropriate to a college course. Successful completion of summer reading and assignments are mandatory for the course. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Prerequisite: “B” average in American History I Honors or department head approval.

1313 United States History II Honors  5.0 Credits  Grades 11-12
This course is part two of the American History survey course. It is designed to enhance the student’s knowledge of American society from the Second Industrial Revolution through modern times. The course will focus on many topics such as technology and its impact on the quality of the life in America, progressive reforms, immigration, civil rights, the consequences of an uneven distribution of wealth and America’s role in world conflicts. Students will continue to develop the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events and determining causal relationships as well as comparing and contrasting the point of view of two or more sources. Students are also required to participate in class and small group discussion. A variety of assessment strategies are implemented. The course covers the same content as American History I College Prep but the scope and pacing are different. Students are required to complete several analytical essays per quarter and write a research paper. Prerequisite: “B-” average in American History I Honors, “A-” average in American History I College Prep, or teacher approval.

1311 United States History II (College Prep)  5.0 Credits  Grades 11-12
This course is part two of the United States History survey course. It is designed to enhance the student’s knowledge of American society from the Second Industrial Revolution through modern times. The course will focus on many topics such as technology and its impact on the quality of the life in America, progressive reforms, immigration, civil rights, the consequences of an uneven distribution of wealth and America’s role in world conflicts. Students will continue to develop the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events and determining causal relationships as well as comparing and contrasting the point of view of two or more sources. Students are also required to participate in class and small group discussion. A variety of assessment strategies are utilized.

9162 Foundations of World Civilizations II  5.0 Credits  Grade 9
This is a history course geared for the student whose accommodations and modifications focus specifically on their reading comprehension, written language and processing disabilities. This course is an examination of people, places and events throughout world history. The course begins with the Age of Enlightenment and concludes with an analysis of post World War II societies and civilizations. The content will focus on the political, social, economic, religious, scientific and technological factors that have shaped world history. Students will also work on developing the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events and determining causal relationships as well as comparing and contrasting the point of view of two or more sources. Prerequisite: Recommendation of special education team.
9372 Foundations of United States History I 5.0 Credits Grade 10
This is a history course geared for the student whose accommodations and modifications focus specifically on their reading comprehension, written language and processing disabilities. The course is part one of a two-year survey course of United States History. It is designed to enhance the students’ knowledge of various aspects of American society from Colonial and Revolutionary America to Reconstruction. Students will study the causes and consequences of the American Revolution, the crisis that led to the development of the Constitution, the early national period, the reform movements of the 1800s, the expansion of the West, and the causes and consequences of the Civil War. Students will continue to develop the following literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events, determining causal relationships between events as well as comparing and contrasting the point of view of two or more sources. Prerequisite: Recommendation of special education team.

9382 Foundations of United States History II 5.0 Credits Grade 11
This is a history course geared for the student whose accommodations and modifications focus specifically on their reading comprehension, written language and processing disabilities. This course is part two of the United States History survey course. It is designed to enhance the student’s knowledge of American society from the Second Industrial Revolution through modern times. The course will focus on many topics such as technology and its impact on the quality of life in America, progressive reforms, immigration, civil rights, the consequences of an uneven distribution of wealth and America’s role in world conflicts. Students will continue to develop literacy skills, citing textual evidence to support analysis of primary and secondary sources, describing and analyzing events and determining causal relationships as well as comparing and contrasting the point of view of two or more sources. Prerequisite: Recommendation of special education team.

9007 Social Studies 5.0 Credits Grades 9-12
This course focuses primarily on functional geographical locations pertaining to the student’s local community. The emphasis is on students’ local neighborhoods, towns and surrounding areas in Massachusetts. These skills are embedded within activities in the areas of Life skills and pre-vocation. Prerequisite: Recommendation of special education team.

1561 Psychology (College Prep) 5.0 Credits Grades 11-12
This course will allow students to acquire a greater understanding of human behavior and the mind. Students will utilize critical thinking skills and develop a better understanding of themselves and the forces acting upon them.

1564 AP Psychology 5.0 Credits Grades 11-12
This course is designed for all students willing to accept the challenge of a rigorous Psychology curriculum. The reading and writing demands will be equal to an undergraduate Introduction to Psychology course. This course will introduce students to the systematic study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, theories, and phenomena associated with each major school of thought and subfield in psychology. It is expected that students take the College Board Exam at the end of the year. A variety of teaching and learning strategies will be utilized to meet these goals of instructing scientific and empirical approaches.

Members of the Class of 2019 must pick EITHER College Prep Psychology OR AP Psychology to meet the completion requirements of the Psychology elective offered at GHS.

1204 AP European History 5.0 Credits Grades 10-12
AP European History is designed to be the equivalent of a two-semester introductory college or university European history course. In AP European History students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments;
making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity. Students enrolled in this course must take the College Board Advanced Placement Exam in May.

1511S Law (College Prep)  2.5 Credits  Grades 9-12
This course is designed to provide the student with an understanding of your rights and responsibilities, knowledge of everyday legal problems and the ability to analyze and evaluate legal disputes. This course will give the student a working knowledge of the Constitution and amendments. Students will study the lawmaking process to examine how a law is made, who makes the laws, who influences the laws and will focus on the emphasis of the Supreme Court’s role. Students will also study the various types of crime and the structure of federal and state law systems. This knowledge will be put to direct use as students study the investigative phase of a crime followed by the trial process. The semester will end on two topics that are relevant to today’s society: Race in law and consumer law.

1521S Sociology (College Prep)  2.5 Credits  Grades 9-12
This course examines the effects of mass reactions to current problems, possible alternatives to contemporary problems, and the relationships between varying groups in our society. The socialization process, institutional structure of society, race relations and social change are some of the topics that are studied.

1541S American Government (College Prep)  2.5 Credits  Grades 9-12
This course is designed to introduce concepts that allow students to become involved citizens, after they leave Grafton High School. Special attention will be given to a citizen’s role at the local, state and federal levels of the American system of government. The structure and operation of our government, the role of elections and the impact of voter behavior on the formulation and foreign policies are made and implemented. Comparisons will be made between democratic and other forms of government, while discussing our modern government’s role at the local, state and federal levels.

1571S Echoes and Reflections: The Holocaust (College Prep)  2.5 Credits  Grades 9-12
Echoes and Reflections is a semester-long multimedia course that goes beyond the historical fact that six million Jews and other innocent victims of the Nazis and their collaborators were systematically murdered in World War II Europe. The course is a comprehensive study of events before and during the Holocaust. The course will provide students with opportunities to realize the relative ease with which fundamental human and civil rights can be denied. Students will understand the ramifications of stereotyping, prejudice, discrimination, and scapegoating.

1900 Independent Study Social Studies  5.0 Credits  Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

1910S Independent Study Social Studies  2.5 Credits  Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.
The goal of the Wellness/Family & Consumer Science Department is to help students develop into responsible and productive adults by introducing them to life-related skills that they need to succeed in society. The courses cover all traditional topics but also stress current topics such as self-esteem, health and wellness, career information, options to resolve conflicts, parenting and family economics. The skills gained in certain courses may be cultivated into careers. Students can pursue higher education in areas such as early childhood education, dietary science, food service, fashion design, interior design, and consumerism. Personal wellness is to allow students to view health issues from a holistic perspective in which all interrelated aspects of human growth are considered: physical, emotional, social, environmental and cognitive. Course work provides students with the knowledge and the opportunity to explore ways to take positive actions towards their own health and wellness and to develop skills that will allow them to resist peer pressure, to resolve conflicts and to manage stress effectively. The Physical Education portion of these programs is designed to have the students learn and put to use the practices of a healthy lifestyle. Through hard work, sportsmanship (socially accepted practices), teamwork and honesty, students will have the opportunity to develop self-confidence, friendships and leadership skills.

8540S Creative Crafts 2.5 Credits Grades 9-12
This course is designed to stimulate the student’s interest in different aspects of creativity. Students will be encouraged to explore a wide variety of crafts for career possibilities or personal satisfaction. Some of the crafts may include eco-friendly projects, quilting, applique, counted cross-stitch, fabric painting, needlework, scrapbooking or other crafts. Students will also be able to integrate a number of other subject areas. Local artisans will be guest speakers and students will have the opportunity to visit local places of business.

8530 Foods and Nutrition 5.0 Credits Grades 9-12
This is an introductory course where students will learn the basic technology of food preparation and be able to identify, understand, analyze and evaluate food choices. Nutritional needs will be analyzed and evaluated. Emphasis will be placed on safety and sanitation in food preparation as well as promoting a healthy lifestyle. Lab units prepare a variety of baked products, side dishes and simple meals.

8630S American Regional Foods 2.5 Credits Grades 10-12
This course will introduce students to regional differences in food. Students will be able to identify the cultural and geographical influences on the foods distinctive to U.S. regions. Students will explore regional American foods and fusion cuisines through collaborative, cross-cultural research, menu planning and meal preparation. Emphasis will also be on healthy lifestyles and nutrition. Prerequisite: “B” average in Foods and Nutrition or teacher approval.

8640S International Foods 2.5 Credits Grades 10-12
This course will introduce students to global cuisines and the diverse contribution each makes to the rich fabric of food selection, customs and preparation. The impact of world and local events as well as geographical influences on food choices will be investigated. Students will explore current trends in ethnic foods, fusion cuisines and the international food industry through collaborative cross-cultural research, and food preparation. Prerequisite: “B” average in Foods and Nutrition or teacher approval.

8560 Early Childhood I 5.0 Credits Grades 9-12
This project-based course is designed to prepare students for the important responsibilities of parenting. Pregnancy and prenatal care, birth, and the physical, emotional, social and intellectual development of young children will be explored. Contemporary issues affecting young children, such as two income families, childcare, child abuse and teen parenting, will also be addressed. Opportunities for observation of children are provided both in class and in community settings.
8660 Early Childhood II 5.0 Credits Grades 10-12
This course is designed to build on the concepts taught in Early Childhood I, while giving students interested in early childhood education the opportunity to further explore the developmental needs of preschool and school age children. Opportunities for work in a variety of community settings such as family daycare, infant centers, social agencies, and local kindergartens and daycare centers are an important part of this observation and participation-based course. Logs of student experiences are kept and shared in class. In class students will learn to create a developmentally appropriate and safe environment for preschool children as they evaluate early childhood education as a potential career. Prerequisite: “C” average in Early Childhood I or teacher approval.

8910 Ind. Study Family & Consumer Science 5.0 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. Requirement: Application and teacher, counselor and principal approval.

8920S Ind. Study Family & Consumer Science 2.5 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. Requirement: Application and teacher, counselor and principal approval.

8210S Health 2.5 Credits Grade 10
This course offers students the opportunity to explore healthful living styles with informative instruction in personal health and fitness, human sexuality, relationships, family life, disease prevention and control, and substance use and abuse. Students will use decision-making skills and role-playing to enhance each unit. Students will also be participants in a variety of health professional presentations on issues such as HIV/AIDS, peer relationships and drugs.

8220S Managing Your Life 2.5 Credits Grades 11-12
Managing your life is a course designed to enhance the information given in the Health course required for graduation. Students will continue to explore their personal character, personality traits, and self esteem. Decision making skills will be practiced using a variety of techniques and role-playing activities. Information on living independently will be discussed and researched including future goal setting of careers. Health topics, such as safe driving, family dynamics, preventative measures in communicable diseases and prevention and protection from illness will be highlighted.

8930S Independent Study Health 2.5 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

8940 Independent Study Health 5.0 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student /teacher conferences. This course is graded Pass/Fail. Prerequisite: Application and principal approval.
8310S Personal Fitness 2.5 Credits Grades 9-12
Physical fitness is to the human body what fine-tuning is to an engine. It enables us to perform up to our potential. Fitness can be described as a condition that helps us look, feel and do our best. More specifically, it is: "The ability to perform daily tasks vigorously and alertly, with energy left over for enjoying leisure-time activities and meeting emergency demands. It is the ability to endure, to bear up, to withstand stress, to carry on in circumstances where an unfit person could not continue, and is a major basis for good health and well-being." Personal fitness includes the basics on strength training, cardiovascular exercise, and core training using the human body. Additionally, all students will participate in fitness testing which will take place during the second and fourth quarters.

8320S Team Sports 2.5 Credits Grades 9-12
Students will be involved in a variety of team sports to develop a working knowledge of each sport, to gain cardiac fitness, coordination, spatial awareness, social skills, and tactical skills. Activities for first semester will include: softball, ultimate disc, soccer, lacrosse, rugby and/or flag football. Activities for second semester will include: volleyball, basketball, and team handball, badminton, lacrosse, ultimate disc, and softball. Additionally, all students will participate in fitness testing which will take place during the second and fourth quarters.

8330S Lifetime Activities 2.5 Credits Grades 9-12
Students will be involved in a number of activities that they can participate in throughout their lives. Fundamentals of each activity will be taught hoping that the student can develop an interest in many of the activities. Activities for first semester include: walking, couch to 5K running program, disc golf, tennis, aerobics and yoga. Activities for second semester include: Tae Bo, aerobics, yoga, creative games, couch to 5K running program, badminton, disc golf and tennis. Additionally, all students will participate in fitness testing which will take place during the second and fourth quarters.

8340S Adaptive Physical Education 2.5 Credits Grades 9-12
Adaptive Physical Education is a diversified program of physical education having many of the same goals and objectives as regular physical education, but modified when necessary to meet the unique needs of each individual. This course is designed to provide students who may be facing a physical challenge with a variety of leisure time experiences including recreation games and fitness activities. This course will be taught by one teacher with the assistance of several peer tutors. The peer tutors will provide the students with the opportunity for individualized instruction as well as providing the opportunity for interaction with their general education peers.

8950 Independent Study Physical Education 5.0 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student / teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

8960S Independent Study Physical Education 2.5 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills and interpersonal skills. Specific course topics and units are arranged by student / teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.
The World Languages Curriculum is based upon the communication skills of reading, writing, listening and speaking. Specifically, the curriculum provides instruction in the three modes of communication: interpersonal, interpretive, and presentational in thematic context. Proficiency gains are accomplished via the use of 21st century technology, authentic reading and listening resources, oral presentations, and writing assignments.

4501 **French I (College Prep)** 5.0 Credits  
Grades 9-12  
This course is designed for students with little or no previous background in the French language. The thematic approach to the course emphasizes the development of the four language skills: speaking, listening, reading and writing. French will be used frequently in the classroom by the teacher and the students.

4513 **French II Honors** 5.0 Credits  
Grades 9-12  
This course is designed for highly motivated students with an interest in continuing the study of advanced French throughout their high school career, who have successfully completed French 1. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. French will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of French 1 or teacher approval.

4511 **French II (College Prep)** 5.0 Credits  
Grades 9-12  
This course is designed for students continuing the study of French, who have successfully completed French 1. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. French will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of French 1 or teacher approval.

4621 **French III (College Prep)** 5.0 Credits  
Grades 10-12  
This course is designed for students continuing the study of French, who have successfully completed French 2. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. French will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of French II or teacher approval.

4631 **French IV (College Prep)** 5.0 Credits  
Grades 11-12  
This course is designed for students who have successfully completed French III or French III Honors with an interest in continuing the study of advanced French. Through a thematic approach, students will be exposed to different grammatical structures, vocabulary, literature, idiomatic expressions and Francophone cultures. Prerequisite: Successful completion of French III or French III H and a teacher recommendation.

4633 **French IV Honors** 5.0 Credits  
Grades 11-12  
This course is designed for highly motivated students with an interest in continuing the study of advanced French and who have successfully completed French 3. It includes an in depth coverage of grammatical points, vocabulary, literature and idiomatic expressions. Class discussions and compositions are important elements at this level. French will be used exclusively in the classroom by the teacher and the students. Prerequisite: Successful completion of French III or teacher approval.
4643 **French V Honors**  
5.0 Credits  
Grade 12  
This course is designed for highly motivated students who want to strengthen their language proficiency and have successfully completed French 4. Emphasis will be placed on an in-depth study of the French language and Francophone culture as well as authentic literary writings. French will be used exclusively in the classroom by the teacher and the students. Prerequisite: Successful completion of French IV or teacher approval.

4551 **Spanish I (College Prep)**  
5.0 Credits  
Grades 9-12  
This course is designed for students with little or no previous background in the Spanish language. The thematic approach to the course emphasizes the development of the four language skills: speaking, listening, reading and writing. Spanish will be used frequently in the classroom by the teacher and the students.

4583 **Spanish II Honors**  
5.0 Credits  
Grades 9-12  
This course is designed for highly-motivated students with an interest in continuing the study of advanced Spanish throughout their high school career, who have successfully completed Spanish I. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. Spanish will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of Spanish I or teacher approval.

4581 **Spanish II (College Prep)**  
5.0 Credits  
Grades 9-12  
This course is designed for students continuing the study of Spanish, who have successfully completed Spanish I. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. Spanish will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of Spanish I or teacher approval.

4653 **Spanish III Honors**  
5.0 Credits  
Grades 10-12  
This course is designed for highly motivated students with an interest in continuing the study of advanced Spanish throughout their high school career, who have successfully completed Spanish II. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. Spanish will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of Spanish II or teacher approval.

4651 **Spanish III (College Prep)**  
5.0 Credits  
Grades 10-12  
This course is designed for students continuing the study of Spanish, who have successfully completed Spanish II. The thematic approach to the course emphasizes the continued development of the four language skills: speaking, listening, reading and writing. Spanish will be used consistently in the classroom by the teacher and the students. Prerequisite: Successful completion of Spanish II or teacher approval.

4663 **Spanish IV Honors**  
5.0 Credits  
Grades 11-12  
This course is designed for highly motivated students with an interest in continuing the study of advanced Spanish and who have successfully completed Spanish III. It includes an in depth coverage of grammatical points, vocabulary, literature and idiomatic expressions. Class discussions and compositions are important elements at this level. Spanish will be used exclusively in the classroom by the teacher and the students. Prerequisite: Successful completion of Spanish III or teacher approval.

4661 **Spanish IV (College Prep)**  
5.0 Credits  
Grades 11-12  
This course is designed for students who have successfully completed Spanish III CP or Spanish III Honors with an interest in continuing the study of advanced Spanish. Through a thematic approach, students will be exposed to different grammatical structures, vocabulary, literature
and idiomatic expressions and Hispanic culture. Prerequisite: Successful completion of Spanish III CP or Spanish III Honors or teacher approval.

4683 Spanish V Honors 5.0 Credits Grade 12
This course is for highly motivated students who wish to strengthen their language proficiency. Students are expected to demonstrate increasing proficiency in the skills of listening, speaking, reading and writing. There is a great emphasis on reading and the ability to summarize, discuss and analyze in the language. More complex grammatical structures and vocabulary will be introduced. Spanish culture and varied literature selections will also be studied. Prerequisite: “B” average in Spanish IV or teacher approval.

4674 AP Spanish Language & Culture 5.0 Credits Grade 12
The AP Spanish Language & Culture course should help prepare students to demonstrate their level of Spanish proficiency across three communicative modes (Interpersonal [interactive communication], Interpretive [receptive communication], and Presentational [productive communication]), and the five goal areas outlined in the Standards for Foreign Language Learning in the 21st Century (Communication, Cultures, Connections, Comparisons and Communities). The course is meant to be comparable to third year (fifth or sixth semester) college and university courses that focus on speaking and writing in the target language at an advanced level. Students enrolled in this course must take the College Board Advanced Placement Exam in May. Prerequisite: Successful completion of Spanish IV Honors.

4591 Latin I 5.0 Credits Grades 9-12
This course will provide students an understanding of the essential elements of Latin structure and an awareness of Roman life, culture and civilization through basic readings. The study of Latin vocabulary and grammatical concepts serves as a vehicle toward a better understanding of the English language. This course is helpful for the preparation of SAT’s and for careers in the sciences, medicine, law and journalism.

4691 Latin II 5.0 Credits Grades 10-12
This course is a continuation of the study of Latin I concepts. Vocabulary enhancement, continued concentration on grammar appropriate to both Latin and English will lead to an ability to read Latin prose. Further study of cultural and historical aspects of Roman society will be covered to expand the knowledge acquired in Latin I. Prerequisite: Successful completion of Latin I or teacher approval.

4693 Latin III Honors 5.0 Credits Grades 11-12
This course is a continuation of the study of the concepts and precepts taught in Latin I & II. Vocabulary enhancement, continued concentration on grammatical concepts appropriate to both Latin and English, and further study of cultural and historical aspects of Roman society will be covered to expand the knowledge acquired in Latin II. Students will begin independently reading passages at the intermediate level. Prerequisite: Successful completion of Latin II or teacher approval.

4703 Latin IV Honors 5.0 Credits Grade 12
This course builds on and utilizes reading skills established in Latin I & II and developed in Latin III. Vocabulary enhancement, continued concentration on grammatical concepts appropriate to both Latin and English, and further study of cultural and historical aspects of Roman society will come primarily from authentic readings in Latin. Students will continue reading independently passages at the intermediate level and discuss those readings in class. Prerequisite: Successful completion of Latin III and a teacher recommendation.

4900 Independent Study World Language 5.0 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills, and interpersonal skills. Specific course topics and units are arranged
by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.

4910S Independent Study World Language 2.5 Credits Grade 12
This course is designed to offer the motivated student an opportunity to further explore his or her interest in a specific content area and to demonstrate proficiency through special projects. It is designed to develop problem solving skills, organizational ability, critical thinking, self-esteem, career development skills, and interpersonal skills. Specific course topics and units are arranged by student/teacher conferences. This course is graded Pass/Fail. Requirement: Application and teacher, counselor and principal approval.
FOUR-YEAR COURSE PLANNING WORKSHEET

This worksheet may be used to assist a student in planning his or her course of study and to document successful completion of each course and graduation requirement. List the courses taken under the appropriate Grade (9, 10, 11, 12). Then list the courses that will be taken in each grade for the remaining years in high school. Label each course that satisfies a graduation requirement. Every year a student must register for 35 credits worth of work.

### GRADE 9

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Level</th>
<th>Credits</th>
<th>Graduation Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 9</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>World Civilization II</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>P.E. / Elective</td>
<td>2.5/2.5</td>
<td>Yes (P.E.)</td>
<td></td>
</tr>
<tr>
<td>World Language</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### GRADE 10

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Level</th>
<th>Credits</th>
<th>Graduation Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 10</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>American History I</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>P.E. / Health</td>
<td>2.5/2.5</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>World Language</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### GRADE 11

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Level</th>
<th>Credits</th>
<th>Graduation Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 11</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>American History II</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>P.E./Elective</td>
<td>2.5/2.5</td>
<td>Yes (P.E.)</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### GRADE 12

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Level</th>
<th>Credits</th>
<th>Graduation Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 12</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>5.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>P.E./Elective</td>
<td>2.5/2.5</td>
<td>Yes (P.E.)</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEST SCORES</td>
<td>MCAS</td>
<td>PSAT</td>
<td>SAT</td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>English/Verbal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>